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THE UNIVERSITY OF ALBERTA
THE JORDAN PLAN: A CASE STUDY IN
EDUCATIONAL CHANGE

by

THOMAS KENNETH PREBBLE



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FACULTY OF GRADUATE STUDIES AND RESEARCH

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ABSTRACT

This study starts from the premise that a great deal of the current literature on educational innovations is conflicting, confusing and inconclusive. The major reason for this failing is the excessive dependence of researchers upon an empiricism rooted firmly in a structuralist explanation of social reality. Structuralism has failed to generate a workable explanation of social change, and this failure is manifested in the lack of theoretical direction of much of the research in the area of educational change.

In recent years social scientists have had at least two alternative theoretical explanations to choose from. The first of these is systems theory which attempts to explain the behavior of social systems in terms of the complex exchanges of information and energy between the elements of the system and the environment. The second approach is an action framework. Action theory and research is based on the Process School of sociology. It considers the subjectively based actions of individuals to be the primary focus of sociological research, and attempts to interpret the behavior of more complex social institutions from this basic starting position. These two approaches have usually been thought to be mutually incompatible frames of reference--the one dealing with large-scale social structures, and the other dealing with small-scale social processes.

W.J. Buckley takes a contrary point of view that social scientists have borrowed their systems models directly from the natural scientists, and that they should revise these models to reflect social reality more

accurately. Any effective model of social system processes should reflect the fact that systems are made up of thinking, acting individuals, and that it is the actions of these individuals that constitute system behavior. Buckley draws heavily on the same theoretical and research antecedents as do the action researchers in order to develop his case. This study was an attempt to conduct an action research investigation within the broad theoretical guidelines of Buckley's Complex Adaptive System Theory. The purpose of the study was to generate grounded hypotheses concerning the process of educational innovation.

The study took the form of an extended case study of the implementation of an innovation in a school system in Alberta. During the 1972-73 school year Jordan High School changed to a four day instructional week. The normal 1400 minutes of instructional time per week were compressed into four days leaving each Wednesday free for a variety of optional activities for both teachers and students.

The fieldwork fell into two phases following the research model described by Herbert Blumer. The first phase--"exploration"--involved a relatively unstructured, wide ranging approach to the data. During this phase the researcher endeavored to become a part of the system and learn to understand the ways in which system members viewed reality. No attempt was made to formulate or test hypotheses at this stage. The phase of exploration took approximately half the school year, at the conclusion of which the researcher was able to choose a research focus for the second phase of "inspection." During this second phase the researcher focused on the relationship between the way teachers perceived the innovation and the way they responded towards it and

towards each other. Particular attention was paid to the objectives teachers perceived for the innovation, and to the way these objectives shifted over time, altering their perception of the innovation itself. The major instrument used in the phase of inspection was an interview schedule administered to all the teachers at the school.

At the conclusion of the study certain hypotheses were generated concerning the way objectives come to be attached to innovations, and to the interrelationship of the two. This type of research methodology is considered to have major implications for the study of educational innovations. In particular, it would seem to offer a new direction to the process by which many educational innovations are at present evaluated.

ACKNOWLEDGMENT

I wish to thank the people who made this study possible. Their identities and the names of their school and township have been altered to assure them a reasonable measure of confidentiality. However the people of Jordan Township, the Superintendent and School Board members of Jordan School District, and the Principal, coordinators, teachers and students of Jordan High School know who they are and I want to thank them for their unfailing cooperation in this study.

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CHAPTER 1

INTRODUCTION

Nature of the Study

The analysis of change in educational institutions is probably one of the most intensely researched areas in the field of educational research. It is also an area that has yielded more conflicting, confusing, and inconclusive findings than most other fields of educational research.

One of the assumptions underlying this study was that much of this confusion, conflict and inconclusiveness has been the result of the failure of social scientists to link their research to an adequate theory of social change. This failure stems not from any lack of methodological rigour on the part of the researchers in the area of educational change, but from the absence of any really adequate theory of social change (Miles, 1964:12).

Most systematic research in educational change has fallen within the structural-consensus tradition of organizational sociology, either explicitly or implicitly. This tradition had led researchers to expect organizations to behave in certain ways on the basis of foreknowledge of the property and structure of organizations. This search for causal relationships has led educational researchers to try to identify those aspects of school systems, and of the environment, that contribute towards the promotion or the inhibition of change.

An explicit assumption of this study was that the structural-consensus tradition has been singularly inappropriate for the study of social change, and that social scientists must search for new social and organizational models to assist them in their analysis of social change. One such model is James Buckley's Complex Adaptive System Model which appears to offer some more realistic premises for the study of social and organizational change.

The objective of this study was to conduct an intensive case study of a single school in the process of change within the broad conceptual and methodological guidelines indicated by Buckley's system model. The purpose of the study was not to test hypotheses, but to explore the process of educational change from a fresh sociological viewpoint in the hope of generating new hypotheses about change.

For more than 50 years the major thrust of research in this area has been directed towards discovering the correlates of social change in the belief that once these factors have been discovered they may be manipulated to accelerate the rate of change. The great bulk of research has been conducted in the belief that it should be possible to identify the quality or qualities of schools that contribute to "innovativeness." There have been a mass of largely inconclusive attempts to determine the qualities of innovative systems from analyses of comparative rates of diffusion of innovations within school systems; a still greater number of investigations of the key properties of innovative systems using survey and experimental techniques; and other more specific research traditions which have

established considerable literatures in the attempt to attribute the degree of innovativeness of schools to particular factors. Attempts have been made to explore and explain the phenomenon of educational change in terms of technology theories, human relations theories, structural theories, bureaucracy theories, and probably many other kinds of theories. But each has provided no more than a partial explanation. Attempts to control or modify any single aspect of the school system seldom result in the degree of change predicted by the particular theoretical model being used.

Gross et al. (1971:30) suggest that the major weakness of this long tradition of research has been a tendency to treat the implementation of organizational innovations as an event rather than as a process. Most of the literature focuses on the impact of the manipulation of one or two variables in an educational setting. All other conditions in the system are taken as given--unchanging, and of little significance to an explanation of the change situation. However, the researcher cannot assume that only one variable in the setting will change. Change must be seen as a process that involves an interrelated set of conditions that can shift over time. To persist in the study of isolated conditions affecting the process of change is akin to searching for the most important organ in the body. After a lifetime of research in this area, Paul Mort was forced to admit that he could detect no single factor which, in and of itself, is highly related to innovativeness. The single most obvious fact coming out of this whole tradition of research is that educational change "takes an extravagantly long time" (Mort, 1964:325). Even

this apparent truism may be called into question by several surveys which indicate that the rate of diffusion of innovations may have accelerated in recent years (Bushnell, 1957; Finn, Perrin and Campion, 1962).

The major criticism to be made against the literature on educational change is on methodological grounds. By adhering to a structuralist explanation of social change, and by failing to take account of the complex interrelationship of all conditions within the change process, most researchers have failed to base their research on sound theoretical or methodological foundations. This study attempted to avoid repeating some of the mistakes of the past by turning to an alternative theory of social change, and using an alternative research methodology. However, this methodological criticism does not imply a blanket condemnation of the findings and propositions of the conventional research in this area. Theoretical imprecision may have contributed to the confusion and inconclusiveness of the literature, but it does not necessarily invalidate the findings. Rather, it imposes a degree of caution on the researcher who would seek support from them. Some reference has been made to a selection of pertinent findings from this research tradition in a later section.

Recognizing the methodological inadequacy and inconclusiveness of these types of investigation, many current researchers in educational change seem to have chosen between two new alternatives.

The first alternative has been to dispense with the search for a complete theory of educational change, and proceed directly

to the adoption of any of the many available change strategies. Adopting a pragmatic theory of truth, any strategy can be claimed to be appropriate to the degree that it does in fact lead to successful innovation. Most of the "change agent" literature of Havelock and others falls within this category. While this strategic approach has yielded a great deal of information, and has been of considerable practical assistance to operating school systems, it suffers from the absence of any comprehensive theoretical base.

The second alternative has been to adopt a systems approach to educational change. If manipulation of single variables fails, to achieve the desired changes, perhaps it is because organizational theorists are failing to take account of the "systemness" of the school, and the interrelatedness of its elements. Educational theorists who have attempted to explain educational change in terms of systems theory have depended heavily on the works of a number of general social systems theorists. Katz and Kahn (1966), Carzo and Yanouzas (1965), Kast and Rosenzweig (1971), Seiler (1961), and Berrien (1967) have all constructed very similar models, basing their work on the General System Theory of Ludwig von Bertalanffy.

Social organizations, it is claimed, are open systems, and have all the characteristics normally associated with this kind of system. Societies and organizations also have many of the characteristics of cybernetic systems, obeying the laws of thermodynamics governing the exchange of energy. The system's tendency towards entropy is reduced and even reversed by the introduction of energy from outside the system, and by the redirection of the system through

the medium of "feedback." Open systems tend towards the "steady state" or "dynamic equilibrium"--the organizational equivalent of "homeostasis."

Despite the promise held out by General System Theory, none of the social system theories listed earlier have been able to arrive at an adequate systems explanation of change. System theorists tend to adopt the same kinds of assumptions about social reality as the structuralists, and consequently suffer the same inability to reach a satisfactory explanation of social change. The reason for this serious failure is that none of these theorists have been able to progress much beyond an organismic systems model of social organization. Such a model, while adequate to describe the structure and processes of a living organism, is able to provide no more than a partial explanation of the processes within a complex, adaptive social system. Nowhere is this shortcoming more apparent than in the attempts of organizational systems theorists to explain the phenomenon of change.

Systems theories based on the organismic analogy seem unable to escape this difficulty. The concept of homeostasis, dynamic or otherwise, is an essential aspect of an organismic open system theory. The acceptance of this concept implies the presence of some kind of "system dynamic" constantly working to maintain the parts of the system in a relatively harmonious relationship. However, the introduction of the "system dynamic" concept immediately implies the fallacies of teleology and reification. The organization is seen as an entity in its own right, and a purposeful one at that. Organizational

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theorists are aware of these difficulties, but mere awareness does not justify their use of such terms as "system dynamic" or "dynamic equilibrium" in their models, even as heuristic devices.

Organismic systems models inevitably, it seems, channel theorists towards a functionalist theory of organizations which holds that all parts of an organization interact together relatively harmoniously in the performance of some collective purpose. In such organizations, the system dynamic "moves a given structure towards being more like what it basically is" (Katz and Kahn, 1966: 67). Acceptance of the organismic analogy drives theorists such as Katz and Kahn to overemphasize the more stable and normative aspects of the social system, at the expense of other equally important aspects. This excessive emphasis on the stable aspects of the social system leaves the theorist with an inadequate theoretical base from which to attempt to explain the phenomenon of organizational change. Organismic systems are unlikely to experience radical changes of direction, except perhaps as the result of massive external pressures. A few social systems theorists, such as Katz and Kahn, have attempted to identify possible sources of "internal strain" which might lead to equilibrating system change, but rarely are they able to explain how such internal sources of strain could ever arise in a system whose major dynamic principle is towards equilibrium.

The practical limitations of the organismic systems model are well illustrated by a number of attempts that have been made to explain change within educational systems. Daniel Griffiths adopts a straightforward systems approach to both organizations and

to change. He suggests that a school is typically an open system and exhibits all the usual attributes of that condition: an exchange of energy with the environment, a tendency to maintain itself in a steady state, a set of feedback processes, a tendency to self-regulation, and a process of progressive segregation by which the system divides into a hierarchy of subordinate systems (Griffiths, 1969:429-30).

Having accepted this set of descriptors, Griffiths is forced to hypothesize that change in such an organization would tend to be relatively infrequent and incremental in nature. The dominant system process is, by definition, one of self-regulation and equilibrium maintenance. Therefore the source of most organizational change must be sought in the environment outside the system. On the basis of these hypotheses Griffiths identifies the major environmental variables which might be expected to induce changes in the system--variables such as the intensity of the stimuli from the environment, and the recency and origins of the appointment of a chief administrator.

This kind of explanation, concentrating almost exclusively on the external forces for change, seems to contradict basic experience. Few people would attempt to dispute that the environment can be a powerful source of change within an organization. But it would seem to be a distortion of reality to limit one's search for the "causes" of change to such extraorganizational features.

The adoption of a simple organismic model such as that proposed by Griffiths makes it very difficult, if not impossible,

to explain the distinctive character of the change processes to be found in any particular organization, or type of organization. It can offer no reason why one type of organization should change any faster or slower than any other.

The Complex Adaptive Systems

Model

Any successful application of systems theory to the study of social organizations must begin with a close study of the nature of such organizations. It is just as important to discover how social organizations differ from mechanical or organismic systems as it is to find similarities between them. One of the few systems theorists to have approached the study of social organizations from this perspective is Walter Buckley.

Buckley's major statement, Sociology and Modern System Theory (1967), is no more than the first outline of a new systems approach to the study of social behavior. It lacks the comprehensive polish of other more conventional treatments of social systems, and its description of system dynamics and system processes appears far more complex and impenetrable than those described by such theories. However it does present an analysis of social systems demonstrably closer to empirical reality.

Buckley would define a system as:

. . . a complex of elements or components directly or indirectly related in a causal network, such that each component is related to at least some others in a more or less stable way within any particular period of time (Buckley, 1967:41).

This definition does not in any way distinguish him from more conventional systems theorists such as Katz and Kahn. The important

shift in focus comes with his description of the particular nature of systems relationships. Whereas the relationship between parts of an organism is physiological, involving complex physico-chemical exchanges, the relationship between parts of society are primarily psychic, involving complex communication processes of information exchange. Katz and Kahn do recognize the importance of information exchange to an explanation of system processes, and yet their entire systems explanation is built on the model of "an energetic input-output system . . . taken from the open system theory as promulgated by von Bertalanffy" (Katz and Kahn, 1966:18). For Buckley, however, this distinction between an energy exchange and an information exchange is absolutely critical, and is the key factor which differentiates organismic systems from complex adaptive social systems.

Buckley draws heavily on the early "Process School" of Baldwin, Cooley, Dewey and Mead to justify his emphasis on this distinction. It was these early twentieth century sociologists who first realized that "the individual is truly social and society truly psychological" (Buckley, 1967:44). This realization allowed the Chicago School to go beyond the old dualism of the individual versus society.

The behaving individual--the psychological person--is essentially an organization that is developed and maintained only in and through a continually ongoing symbolic interchange with other persons (Buckley, 1967:44).

Social structure emerges only as some of these interchanges become repetitious and expected in certain situations. The only aspects of societies and social organizations that differentiate them from

individuals, for the purpose of scientific investigation, are those complex networks of communication interrelationships that give them some degree of wholeness or systemness.

By placing considerably more emphasis on the importance of meaningful interaction and information exchange between individuals, Buckley is able to arrive at a more satisfactory definition of the system dynamic. Organismic theorists such as Katz and Kahn, Seiler, Bertalanffy and Berrien are forced to speak of the system dynamic in an imprecise, semi-mystical fashion that speaks of "system needs" and "equilibrium maintenance." Buckley is able to avoid the fallacies of reification and teleology by locating the source of the system action in the psychic energy, or motive power, of its human members. The source of action in a complex adaptive system is the tension, stress or strain which is present in one form or another in all social organizations. This is to define the system dynamic in the only way that makes sense--in terms of the meaningful action of its human members.

Buckley would subscribe to most of the conventional list of open system properties, but with some emphases of his own. He gives considerably more importance to the concept of "feedback" in complex adaptive systems, and attempts to trace the full meaning and implications of that concept in psychological as well as sociological terms. Buckley notes that the concept of feedback has now been vulgarized, and is often equated with any reciprocal interaction between variables. One of the most distinctive features of social systems is their purposive or goalseeking character. The

concept of feedback allows the theorist to describe the processes of a goal-directed, as distinct from merely a goal-oriented, system since it is the deviation from the goal state itself that directs the behavior of the system, rather than some predetermined internal mechanism that aims blindly (Buckley, 1967:53). Equilibrium theories are properly classified as being goal-oriented, describing systems which are essentially nonpurposive and precybernetic.

The problem previously associated with the teleology implied by the concept of a system's "purposeful action" is also removed by Buckley's emphasis on meaningful action between individuals as being the basic system process. Buckley's definition of these processes is sufficiently broad to allow for multiple and even conflicting system goals, delayed and selective response to feedback, and varying degrees of interconnectedness between parts of a system--all of which seem to be essential characteristics of any theory that attempts a comprehensive explanation of the behavior of complex adaptive systems.

Another open system process which needs some modification is that of "differentiation." Bertalanffy suggests that open systems tend to move in the direction of differentiation and elaboration of structure. While he draws from the plentiful examples of biology to support this argument, social systems theorists are forced to rely on the inconsistencies of Parsons' "structural evolutionism" to defend their use of the concept of structural differentiation. Again, little reason apart from the teleological and unsupported argument of "system dynamic" is offered for this phenomenon.

Buckley avoids the linear imperative of differentiation by suggesting two different kinds of system processes. "Morphostasis" refers to those processes in complex system-environment exchanges that tend to preserve or maintain a system's given form, organization or state. "Morphogenesis" refers to those processes which tend to elaborate or change a system's form, structure or state. While he is concerned to emphasize the morphogenetic processes which have tended to be neglected by current systems theorists and sociologists, he does not make the mistake of grounding this process in a system "force" or "imperative" (Buckley, 1967:58-9). Morphogenesis, rather than any kind of evolutionary force, is more the capacity of complex adaptive systems to generate alternatives, and to combine the infinite variety of choices in new ways. In this connection, Buckley takes issue with another supposed quality of open systems--"equifinality." According to this principle, a system can reach the same final state from differing initial conditions and by a variety of paths. Buckley suggests it is just as meaningful to speak of organizations in terms of "multifinality" whereby similar initial conditions may lead to dissimilar end states (Buckley, 1967:60).

This latter concept has obvious and serious implications for the question of causality, and indirectly for conventional sociological methodology. It suggests that full knowledge of all initial variables may not be enough to predict subsequent behavior; that the intervening morphogenetic processes inherent in any series of interactions among normatively and purposively oriented individuals and subgroups may provide more information about subsequent behavior than would any

amount of information about the separate variables.

A basic thesis of this study was that systems theory offers the best hope of arriving at a satisfactory explanation of change within social organizations. The fact that most current systems theorists have been singularly weak in their explanations of social change does not contradict this assertion. Rather it suggests that the systems models being used, and our understanding of these systems, are both incomplete and unsound. Buckley has pointed out the essential differences between organismic and complex adaptive systems, and gone some way to suggesting a more appropriate model for such systems.

The adoption of the complex adaptive systems model as a broad conceptual framework does not imply that this study was an attempt to provide a complete description of the operations of any system. This task would be rendered almost impossible by two factors: firstly, as has been mentioned earlier, Buckley's model is no more than the outline of a complete systems model--many of the important systems dynamics have yet to be defined; and secondly, it is doubtful whether any complete description of the properties and processes of a social system is possible--of necessity a description of such a complex entity must be selective, thereby losing one of the essential qualities of systemness.

Instead, the complex adaptive systems model was used as an heuristic device--as a model to assist in the process of discovery. Having taken the position that the complex adaptive systems model offered the most promising general conceptual framework within which

to analyze social systems in the process of change, the researcher was able to use the model in two important ways. Firstly, implications for the conduct of sociological inquiry were drawn from the model. Secondly, the researcher was able to focus his inquiry on those types of phenomena with which the complex adaptive model is most concerned. These two applications of the model will be described in the following section.

The Action Framework

An Action frame of reference was adopted for the study on the grounds that the assumptions and methodology of this tradition were most appropriate to any application of the complex adaptive systems model. Action Research, as described by Silverman (1970) and Greenfield (1973), is not a wholly new concept. Its roots can be traced to the Chicago or "process" school of sociological thought, and men like Albion Small, G.H. Mead, R.E. Park, E.W. Burgess and John Dewey, as well as to the more recent developments of "symbolic interactionism" and the work of people like Herbert Blumer. These theorists, coming from different disciplines and different times, have one major theme in common: typically they view society as a complex, multifaceted fluid interplay of widely varying degrees and intensities of association and dissociation. Such a view holds that society can best be described in terms of process rather than structure; and that structure is not something distinct from the ongoing interaction process, but rather a temporary, accommodative representation of it at any particular time (Buckley, 1967:18). Or, as Evon Vogt put it, social and cultural structures are only the

intersections in time and space of process in course of change and development (Vogt, 1960:18-33).

Building on this process view of reality, action theorists hold that social structure is the outcome of the interaction of motivated people attempting to resolve their own problems, as opposed to the mainstream sociological view which maintains that behavior may be viewed as a reflection of social structure.

Silverman's description of the "ideal-typical action theory" provides an adequate basis for a discussion of action theory. Action theory draws a real distinction between the social and the natural sciences. Conventional empiricism has made no such distinction, attempting to use the assumptions and methods of natural science to investigate social phenomena. Action theorists maintain that the phenomena studied by social scientists differ in one important way. The natural sciences are based on the assumption that the behavior of matter may be regarded as a necessary reaction to a stimulus. Matter itself is neutral and does not understand its behavior (Silverman, 1970:127). In applying the methods of natural science to the study of social phenomena, social scientists have tended to assume that social phenomena are of the same class of objects, that human behavior is determined by a calculus of external forces, and that objective observation of this behavior by the social scientist is the only way of understanding what is going on. This view neglects the simple fact that human beings do have some understanding of their behavior, and that their actions are meaningful to them.

Social life, therefore, "has an internal logic which must be

understood; the natural scientist imposes an external logic on his data" (Silverman, 1970:127). Instead of ignoring the subjective interpretations that human beings place upon their actions, these should be the focus of social scientific inquiry. This view implies a rejection of most of the restrictions of the behavioralist perspective. Objective observation of human behavior may tell the researcher very little about the significance and meaning of this behavior to the people concerned. It is the task of the action researcher to interpret human action in terms of the subjective meanings to the people involved in the action.

Action theory draws heavily on the "symbolic interactionism" of Herbert Blumer. Symbolic interactionism rests on three premises. Firstly, Blumer maintains that human beings act towards things on the basis of meanings that these things have for them; secondly, the meanings of things are derived from the social interaction that one has with one's fellows; and thirdly, these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters (Blumer, 1969:2). These three premises underly all of symbolic interactionism and have important implications for sociological research.

The key to symbolic interactionism is the fact that people, individually and collectively, attach meanings to the objects that comprise their world, and that they are prepared to act on the basis of these meanings. If a researcher wishes to understand the action of people, he must learn to see their actions and the objects of their world as they see them. People are subjective, and it may

well be that our conventional efforts to view human behavior objectively, by means of rigid instrumentation, have distorted rather than clarified our knowledge about human behavior and action.

When people associate with one another it is important to realize that this association is necessarily in the form of a process in which they make symbolic indications to one another, and interpret each other's indications. This social interaction becomes the most important focus of attention for the action researcher, because it is from this interaction that actions and objects are integrated and take on new meanings. Interaction is more than a simple exchange of universally recognized symbols. Social actions, whether individual or collective, are constructed through a process in which the actors note, interpret and assess the situation confronting them. The human being is more than merely a behavioralist's responding organism. He is an acting organism, forced to construct his own line of meaningful actions.

The complex interlinkages of acts that comprise organizations, institutions, divisions of labor, and networks of interdependence, are moving and not static affairs. This view is in direct contrast to the functionalist perspective. The symbolic interactionist and the action theorist study and explain even large scale organizations in terms of the processes of interpretation engaged in by the acting participants as they handle their respective positions in the organization (Blumer, 1969:50).

Silverman has summarized this discussion by presenting seven propositions underlying the basic tenets of an action frame of reference:

1. The social sciences and the natural sciences deal with entirely different orders of subject-matter. While the canons of rigour and scepticism apply to both, one should not expect their perspective to be the same.

2. Sociology is concerned with understanding action rather than with observing behaviour. Action arises out of meanings which define social reality.

3. Meanings are given to men by their society. Shared orientations become institutionalised and are shared by later generations as social facts.

4. While society defines man, man in turn defines society. Particular constellations of meaning are only sustained by continual reaffirmation in everyday actions.

5. Through their interaction men also modify, change and transform social meanings.

6. It follows that explanations of human actions must take account of the meanings which those concerned assign to their acts; the manner in which the everyday world is socially constructed yet perceived as real and routine becomes a crucial concern of sociological analysis.

7. Positivistic explanations, which assert that action is determined by external and constraining social or non-social forces, are inadmissible (Silverman, 1970:126-7).

The application of an action frame of reference implies the acceptance of a completely different set of basic assumptions and procedures than those dictated by conventional empiricism. The two branches of social science start from different premises about reality and, therefore, the conclusions reached by each cannot be assessed in terms of the other's tradition. Each has its own criteria of adequacy, and it would be meaningless to apply the criteria of conventional empiricism to an action framework analysis.

Action analysis rejects the four means of providing empirical validation that are customarily required by the conventional social sciences. Adherence to scientific protocol, testing of hypotheses,

engaging in replication, and using operational procedure do not provide the empirical validation that action research requires.

They give no assurance that premises, problems, data, relations, concepts and interpretations are empirically valid. Very simply put, the only way to get this assurance is to go directly to the empirical social world - to see through meticulous observation whether one's premises or root images of it, one's questions and problems posed for it, and the interpretations one applies to it are actually borne out. Current methodology gives no encouragement or sanction to such direct examination of the empirical world (Blumer, 1969:32).

"Field method" is the research methodology most appropriate to the action frame of reference. Field method is a generic term for observing events in a natural situation. The strategic requirements of field work are virtually self explanatory:

... once the researcher has his focus of interest, he must locate a site that contains people and social activity bearing upon that interest; then he must enter the site, establish an identity and relations with the host, watch the people and their activity, listen to the symbolic sounds that will make meaningful much of what goes on there, record his experiences, convert these experiences into data, analyze them, and validate his new understanding (Schatzman and Strauss, 1973:13).

As the whole emphasis of action research is upon the subjective meanings that people have for their actions, rather than upon the direct and objective categorization of human behavior, the field researcher generally refrains from any premature attempt to articulate problem statements in advance of his inquiry. Problem statements are not prerequisite to field research; they may emerge at any point in the research, even towards the very end (Schatzman and Strauss, 1973:3).

Similarly with hypotheses, the field researcher is reluctant to make a priori assumptions about the objective character of social

situations in the form of hypotheses and operational definitions that will likely serve to mask the important features of social reality.

Research must instead be used to generate 'grounded' theories which, rather than forcing data into a preconceived 'objective' reality, would seek to mobilise, as an explanatory tool, the categories which the participants themselves use to order their experience (Silverman, 1970:229).

Having done away with the necessity to present detailed problem statements and lists of hypotheses in advance of the study, the researcher will probably conduct his research with a minimum of formal instrumentation. Schatzman and Strauss refer to the field worker as a "methodological pragmatist" concerning himself less with whether his techniques are "scientific" than with what specific operations might yield the most meaningful information.

He already assumes his own honesty, rationality and scientific attitude; therefore he is not ready to concede in advance the superiority of certain types of "instrumentation" over his own abilities to see and make sense of what he sees. He is certainly aware of selectivity in human perception and of the probability of human bias, but he does not view "objective" or "consensually validated" techniques as being free from these limitations either (Schatzman and Strauss, 1973:8).

The field researcher will also adopt a different set of criteria for verifying his observations than would be expected of the conventionally objective observer. The criteria for adequacy, adapted from Homan's Indices of Subjective Adequacy, revolve around the question of the extent to which the observer has had the opportunity to experience personally the culture which he wishes to know. Whether or not the observer will obtain an accurate interpretation of the social meanings by which members of the group

live will be a function of:

1. The amount of time the observer spends with the group.
2. The proximity of the group to the observer's place of residence and work.
3. The variety of the status opportunities and activities within which the observer can relate to his subjects.
4. The commonality of language between observer and subjects.
5. The level of intimacy established between the observer and his subjects.
6. The extent to which the observer confirms the expressive meanings of the community, either directly or indirectly (Bruyn, 1966:180-4).

The central thrust of these indices is best summarized by this statement by Bruyn (1966:196):

The closer we come to reality, the less important are the distinctions between subjective and objective knowledge. When we are able to express reality meaningfully according to the common value within it, and at the same time describe reality factually in the postulates which explain it, then we will have achieved an ideal unity in our knowledge of man and society.

Toward an Integration of Systems Theory and Action Framework

Proposing a conceptual framework couched in systems theory, alongside a methodology firmly within the tradition of action research, may appear at first to be self confounding. Silverman suggests that action and systems explanations are "conflicting rather than complementary frames of reference [and are] concerned with different types of problem" (Silverman, 1970:143). He takes the view that each approach necessarily imposes mutually incompatible views of social reality.

The Systems approach tends to regard behaviour as a reflection of the characteristics of a social system containing a series of impersonal processes which are external to actions and constrain them. In emphasising that action derives from the meanings that men attach to their own and each other's acts, the Action frame of reference argues that man is constrained by the way in which he socially constructs his reality. On the one hand it seems, Society makes man, on the other, Man makes society (Silverman, 1970:141).

This claim is difficult to refute if by "systems theory" we refer to the relatively crude mechanistic and organistic analogizing of Katz and Kahn and others. Most attempts to explain social reality in terms of systems theory offer little more than an obscured structural functionalist interpretation which seems to place all the emphasis on the structural forces operating within systems, and leaves little room for a discussion of meaningful individual action.

While the two traditions have tended to remain quite distinct in practice, there is no logical reason why they should remain so. Percy Cohen suggests that the two approaches are complementary rather than conflicting. Systems theory adopts an "holistic" approach to reality, seeking to explain the actions of parts of a system in terms of the nature of the whole; action research takes an "atomistic" approach, viewing the system as an outcome of the action of its parts (Cohen, 1968:14). Knowledge of the system does not tell us everything about the action of its individual members, and conversely, information about system members will not provide a complete description of the nature of the system. Cohen suggests that this is because system members have biological and other characteristics which are separate from the nature of the whole system, and that individuals

have some choice over which aspects of the system to respond to.

Cohen's explanation comes close to the sort of explanation one might expect of Buckley. A systems explanation can never accurately predict the behavior of all system members because prediction is not one of the attributes of systems models. Such models describe the nature of the interrelationships between parts of the system; they explain this relationship, but they do not predict. The morphogenetic systems process of multifinality obscures any attempt to track down precise causal chains.

Wagner (1968:58) is largely correct when he suggests that it is almost impossible "to submit adequate interpretations of large scale societal structures and problems without resorting to non-voluntarist (i.e. positivist) explanations." Attempts to do so from an action perspective inevitably raise the problem of what he calls "displacement of scope." But the reasons he would suggest for this difficulty are probably not insurmountable. Individuals interacting in meaningful ways with one another make up systems. There are no accurate explanations of systems behavior which cannot, at least theoretically, be reduced to this interaction. It should be noted that what is being suggested is not simply a psychological reductionism. It is not merely the individuals that define the system, but the nature of the meaningful symbolic interaction between individuals, and the ways in which such interactions modify both the individuals and the situation. If these basic human interactions form the building blocks of systems, then any penetrating analysis of social systems must begin with a study of the members of the system and the ways in which they interact.

Far from being incompatible frames of reference, it seems that action research may be the most appropriate methodology for the study of social systems. It would seem that action research provides the only method capable of discovering the complex nature of the interrelationships among members.

The sociocultural pattern is generated by the rules (norms, laws and values - themselves generated in a similar manner) and by the interactions among normatively and purposively oriented individuals and subgroups in an ecological setting. Full understanding and explanation can appeal, alone, neither to early history nor common human characteristics (initial conditions), nor to final structure and functions. Attention must finally be paid to the interactions generated by the rules, seen as only limiting frameworks of action; to the information, meanings and revised rules generated by the interactions; and to the more or less temporary products that represent the current state or structure of the ongoing process (Buckley, 1967:61-62).

Nor should the application of a systems model in any way compromise the way in which the action research is carried out. To the extent that both approaches place key importance on the meanings that individuals and groups attach to events, and the ways in which these meanings are modified through interaction between individuals and groups, action research should yield the type of data necessary to operate the systems model without imposing any predetermined interpretation or structure on the phenomena under study.

CHAPTER 2

DESIGN OF THE STUDY

Statement of the Problem

Conventional wisdom suggests that a researcher prepare a relatively articulated problem in advance of his inquiry. This implies that he would not, or could not, begin his inquiry without a problem. Yet, the field method process of discovery may lead the researcher to his problem after it has led him through much of the substance of his field. Problem statements are not prerequisite to field research; they may emerge at any point in the research process, even towards the very end (Schatzman and Strauss, 1973:3).

Whereas the action framework does not demand a precise and detailed statement of problems in advance of the research, it is necessary for the researcher to be able to indicate his general focus of interest, and thereby his general orientation towards the data.

One of Buckley's central arguments is that "the degree of commonness and specificity of norms and values in a society is empirically problematic" (Buckley, 1967:159). Buckley is contradicting one of the basic assumptions of structural-consensus theory--that if we knew all the rules and norms of a society, and had complete knowledge about the properties of that system, and of the input from the environment, then we would be able to predict all system behavior precisely. Buckley is suggesting that norms and values may not be universally held within a society or system, and certainly do not provide a precise blueprint for action.

The purpose of the study was to explore this question of

consensus as part of a broader case study of a system undergoing change. At the beginning of the research there was a reluctance to commit the study to a more precise statement of the problem. Such a statement would have led to a premature focusing of the research, and the real possibility that important dynamic elements in the change situation would be omitted or misunderstood.

The overriding objective was to discover something about the processes that operate inside an education system under conditions of change. The research methodology would be derived from action theory, and the study would be presented in a case study matrix. It was not an hypotheses-testing study, but hopefully an hypotheses-generating exercise. A prerequisite of successful hypothesis generation is a loose research design which does not attempt to impose structure on events that are still in the future. By focusing the inquiry on the broad area of consensus, the researcher was hoping to generate hypotheses within this area, rather than attempting to test existing hypotheses.

To summarize, the objectives of the study were:

1. to study the implementation and development of an educational innovation within an action research framework;
2. to explore the subject of consensus within the total system.

Review of the Literature on the Implementation of Innovations

The nature of the study imposed certain delimitations on the review of the literature. The acceptance of an action framework placed the study outside the broad empirical research tradition of

most of the change and innovation literature. The differences between these two traditions have been presented in an earlier section. This study was not, therefore, attempting to build from an orthodox and comprehensive knowledge base, and the review was not intended to be in any way complete. The purpose of the review was to familiarize the researcher with some of the more promising directions that empirical researchers have taken in the study of educational innovations. It was hoped that these research directions might help to identify key elements in the innovation process which might form foci for investigation during the action analysis.

The sheer size of the literature on change and innovation was an added incentive to impose some severe limitation on the literature review. In a recent review of the literature, Havelock (1971) identified over 4,000 relevant studies in the area of innovation, and estimated that he had probably failed to locate an equivalent number.

The objectives of the study did allow two kinds of delimitation to be applied to the review. Firstly, the study focused on the implementation stage of the innovation process. Secondly, the emphasis was placed on the effect of social interaction and group consensus on the implementation of the innovation.

The main reason for choosing to focus on the implementation stage of the innovation process rather than the earlier stage of initiation was that very little effective research has been done in the area. Gross et al. (1971:29-40) reviewed the literature on the implementation of educational innovations and found that the great

majority of studies concentrated almost exclusively on the earlier stage of initiation. This emphasis reflects the widespread belief that the process by which an innovation is first introduced to a system is of far more significance than the process by which the innovation is actually implemented over a period of time.

Social scientists have generally maintained that implementation of an innovation depends on the overcoming of the initial resistance of organization members to the change. For example, Chesler and Barakat (1967) refer to a fear of failure which makes teachers resistant to new practices. In the same tradition of research, Carlson (1965) found that resistance will often occur when the innovation is perceived to threaten a teacher's established competencies. Watson (1967) made this concept of resistance the central feature of a theory of educational innovation. He described the phases through which a typical innovation passes as resistance builds up and is finally broken down. This orientation has heavily influenced the literature on the strategy of effecting innovations. The group dynamics literature that deals with organizational change tends to emphasize this aspect of overcoming resistance to change. The work of Schein and Bennis (1965) is a prime example of this approach.

The major shortcoming of this approach is that it takes little account of the change in members' attitudes after their initial acceptance of the innovation. Members may not all accept the innovation with equal enthusiasm; events may occur to change the attitudes of members towards the innovation; and the innovation itself may

change over time.

Most of the literature on educational change seems to make the assumption that as soon as the innovation has been accepted by the system members, the process of innovation is virtually complete, and the stage of evaluation takes over. Those studies which do focus on the implementation phase of the innovation process tend to regard it as an event rather than as a process. This tendency was criticized in an earlier section. Such studies generally attempt to isolate factors which facilitate or inhibit the implementation of the innovation. There is a large group of researchers who write about the advantages of using an external change agent to facilitate the implementation of innovations (Havelock, 1973; Watson and Westley, 1958; Chin and Benne, undated). The strength of support for the innovation from groups inside and outside the system, coupled with the acceptance by members of the need for change, have also received considerable attention (Brickell, 1961; Abbott, 1965). Others claim that the retraining of organization members is a critical factor in the implementation of educational innovations (Heathers, 1967). Any number of other "facilitators" have been identified by researchers in this field.

Here again, the weakness of this type of research is that the tendency is to study innovation as an event rather than as a process. It is not particularly meaningful to study the impact of a single variable in isolation from all the other conditions, both static and changing, that make up any innovation setting. Gross et al. (1971:31) criticize much of this literature on the grounds that most

of these barriers and facilitators have not been uncovered by rigorous examination of organizations undergoing change, and that much of the literature is frankly speculative and hortative in nature. They suggest there is a need for more intensive, longitudinal studies of school systems in the process of innovation. In this respect, the case study approach enabled the researcher to attempt to fill a serious gap in the research literature. By monitoring the implementation of an innovation over an extended period of time, it was hoped that some of these methodological inadequacies would be avoided, and some real insight would be obtained into the process by which an innovation is implemented.

The second objective of the study was to focus on the effects of social interaction within the organization on the implementation of the innovation. More particularly, the researcher wanted to study patterns of consensus within the organization to determine how these related to the innovation, and the way in which it was being implemented.

There is a large amount of research which has a bearing on this perspective. Much of this research focuses on the effects of group cohesiveness on the innovation process. Cartwright (1959) reviewed a group of studies which indicate that individuals who are strongly attracted to the other members of a group tend to share the norms of the group. In Newcomb's classic study (1943), it was demonstrated that people's most basic attitudes could be profoundly altered by the reference group in which they found themselves. Taking these kind of findings a stage further, Coch and French (1952) were able

to demonstrate that desirable work norms could be strengthened by reinforcing the cohesiveness of the group through group discussions. Although subsequent attempts to replicate this kind of finding have not been very successful (Gross et al., 1971:27), many studies seem to assume the validity of this kind of relationship. In fact, the bulk of the literature would suggest that attempts to alter group norms and behavior, or to introduce innovations that run contrary to these norms, would be most difficult. These kinds of studies lead up to Newcomb's theoretical proposition that individuals who share similar beliefs and attitudes tend to interact more together. Conversely, individuals who interact together will tend to be susceptible to each other's beliefs and attitudes. This small selection from the research is enough to suggest a strong link between the attitudes and cohesiveness of a group, and the way in which the group responds to an attempt to implement an innovation.

Havelock (1971) found that the major theoretical and empirical studies of innovation could be grouped into three general categories corresponding to the principal models, methods and orientations employed by the researchers. He identified these as the Research, Development and Diffusion Perspective, the Social Interaction Perspective, and the Problem Solver Perspective. The category coming closest to the emphasis of this study was the Social Interaction Perspective.

The Social Interaction perspective places a great deal of emphasis on the pattern of social relations within a social system. Social Interaction theorists tend to study the patterns of acceptance

by individuals and groups, rather than any dynamic properties of the innovation itself. They look at the informal structure of an organization--for the "opinion leaders," the "innovators," and the "laggards" within the system. Peer group pressure and group identity tend to be viewed as of great importance in the acceptance and spread of an innovation through a system. Social Interaction theorists commonly base their research on the five phase "AIETA" Model comprising: awareness, interest, evaluation, trial and adoption. Mort (1964), Carlson (1965) and Ross (1958) are just three of a large number of researchers in the area of educational innovation who adopt this perspective.

From an action framework perspective, the Social Interaction perspective is a promising one. Both perspectives share common ground in their emphasis on social interaction as being the key element in the study of social processes. Both tend to view social structure as secondary in significance to the more basic processes of interaction. Carlson's study of early and late adopters (1965), and Rogers' study of "cosmopolitan" and "local" orientation, are the kinds of findings that might almost have come from an action study.

A weakness of the Social Interaction perspective has been a failure to study the innovation itself as an important variable in the change situation. Most of the research on educational innovation undertaken from a Social Interaction perspective treats the actual innovation as a non-problematic element in the diffusion process. These researchers have tended to select relatively concrete innovations and study the flow of the innovation as it passes through

a social system. Social Interaction theorists tend to be wedded to a thoroughly empirical research orientation. By studying only those innovations which are relatively static, concrete entities, they are able to stabilize one important variable in the research situation. Action theory is not forced to narrow its research focus in this artificial manner, and is free to study the way in which the innovation may change and evolve over time. Exchange theorists such as Newcomb (1953) would even lead the action researcher to expect some change in the innovation as the result of the interaction process within the organization. This failure of Social Interaction theorists to study the process by which innovations are transformed and adapted was noted by Havelock (1971:11-12). Again, it was hoped that by studying the effects of social interaction on the implementation of an innovation, using an action framework, some of the methodological inadequacies of the empirical Social Interaction perspective might be avoided.

Selection of the Case

It was decided that the most effective vehicle for the proposed study would be a case study of an innovation introduced into a single school or school system. Action research is very demanding on the researcher in terms of time and energy, and it was considered that, if possible, the study should be restricted to a single institution. In this way the researcher would be able to develop the wide net of relationships necessary to gain the required level of intimacy with the system.

In June 1973 the researcher was present at a conference of

educators at which a proposed innovation was being discussed. The Superintendent of the Jordan School Board addressed the conference on the subject of an innovation which he hoped would be introduced into one of the schools in his system that coming September. The school was the Jordan Junior/Senior High School, and the innovation already bore the name of the Jordan Plan.

As the Superintendent explained the Jordan Plan it involved a rescheduling of the school week by which the 1,400 minutes per week of instruction time would be redistributed over four days rather than the usual five. Whereas in the previous school year (1972-73) the school had operated five days a week, with seven 40 minute periods each day, an 80 minute lunch break and a 30 minute morning recess, under the Jordan Plan the school would operate for only four days per week, with seven 50 minute periods each day, a ten minute break in the morning and a 30 minute break for lunch. Having fulfilled their legal attendance requirements in four days, the students would be free to spend the fifth day, Wednesday, as they or their parents wished. Teachers, on the other hand, would be required to work an extra half day on Wednesday morning to satisfy their contractual obligations under the Education Act.

It was anticipated that a program of sporting, cultural and recreational activities would be organized for Wednesdays. These courses were to be offered to students as inexpensively as possible and attendance would be completely voluntary. It was hoped that instructors for these Wednesday courses could be recruited on a voluntary basis from amongst the community. The teaching staff was

to have no formal responsibilities in the operation of the Wednesday program of activities. It was expected that teachers would devote Wednesday morning to a variety of non-instructional tasks: staff meetings, departmental meetings, lesson planning and preparation, field trips and interviews with parents, to mention only a few of the possible activities. Some mention was made of the objectives of the Jordan Plan, and of the elaborate procedures by which the Superintendent and school staff had gone about securing the approval of all affected groups within the school system and the community.

The proposed innovation presented an ideal subject for study. The research could be restricted to one relatively small school of 700 students; the innovation was apparently new, and therefore posed none of the contamination problems that tend to influence borrowed innovations; the school was located within a few miles of the researcher's place of work; and prospects of gaining permission to conduct the study seemed favorable.

Securing Permission for the Study

It was late August before a meeting could be set up with the Superintendent of the system. It was explained that the researcher was interested in studying the implementation of educational innovations within school systems, and that the proposed innovation appeared to provide an excellent case study in this area. The Superintendent then explained the objectives of the innovation, and described the evolution of the Plan to that date. He reported that the School Board had insisted on some form of independent evaluation study being carried out, and suggested that the proposed research might constitute

such a study. The researcher insisted that his role would not be an evaluative one and proceeded to define his proposed role as clearly as possible.

1. The researcher would not be conducting an evaluation study.

That is, he would not comment on the merits of the innovation itself. The major focus of the research would be upon the manner in which the innovation was implemented, and the way in which the innovation affected the system itself.

2. The researcher would refrain from offering advice to any member of the system concerning the implementation of the innovation.

3. The researcher should be free to employ any research methodology conducive to the study, although the Superintendent and the School Board would retain the right to withdraw this privilege.

4. The researcher would preserve the confidentiality of his sources, both during the course of his research, and in any subsequent documentation.

5. The researcher undertook not to serve as a channel for information between members of the system. It was pointed out that the researcher did not want to influence the innovation process in any way. Any information given in confidence to the researcher would remain confidential for the duration of the research.

In turn, the Superintendent asked the researcher for two services. Firstly, he suggested that there would be information of a quantitative nature concerning the implementation of the innovation which the researcher would be in a good position to obtain and that the Board would like to have for its own evaluation. Having insisted

that any such information would only be of a quantitative, value-free nature, the researcher agreed to this request. Secondly, the Superintendent requested that at the conclusion of the research period, the researcher should present his conclusions to the School Board. This request was also agreed to.

The Superintendent then approached the School Board on behalf of the researcher and gained permission for the proposed study. It was understood that the research would probably last for the entire school year.

Gaining Entry to the System

The literature of action and field research devotes considerable attention to the manner in which the researcher first enters the system. It is extremely important that the researcher should not be seen to be closely identified with any major element in the system. In this case, the particular concern was that the researcher should not be viewed by the teachers or the parents as an agent of the administration. In the ideal field research situation, the researcher should be able to establish free and open relations with all members of the system regardless of their position.

In fact, this task was not as difficult as much of the literature would suggest. Perhaps because of the often repeated fact that this was not an evaluation study, few members of the system ever displayed any suspicious or negative feelings towards the researcher. The researcher was introduced to the Principal of the school during the first week of term. The Principal had already been informed of the nature of the research, and he gave his full

support and cooperation to the study.

The researcher was introduced to the staff of the school at a general staff meeting during the second week of the semester.

The researcher was given the opportunity to explain the purpose of the study and to ask the cooperation of the staff for various information gathering procedures during the year. When the staff had been reassured that the object of the study was not to conduct an evaluation of any kind, the teachers accepted the presence of the researcher.

Defining the Role of the Fieldworker

The nature of the observational perspective which the fieldworker adopts is likely to affect every aspect of the research. The importance of defining this perspective at the beginning of the study cannot be overestimated. Schatzman and Strauss (1973:58-63) describe five possible observational perspectives, ranging in a rough continuum from the non-participant to the participant observer:

1. Watching from outside. When the field researcher observes from outside the social setting without being observed by the members of that setting.
2. Passive presence. In this perspective, the observer is present in the situation but avoids all possible interaction with participants.
3. Limited interaction. Where the researcher engages in minimal clarifying interaction, but does not attempt to direct interaction along channels of his own choosing.
4. Active control. In this perspective the researcher actively

controls interaction along lines designed to provide information bearing upon the research.

5. Full participant. In this extreme perspective the researcher is a full participant in the activity under study, while simultaneously his identity may be either covert or overt.

The perspective which was adopted in this study tended to move between the third level of limited interaction and the fourth level of active control, depending on the nature of the social interaction being studied at the time. When observing interaction between two or more members of the system the perspective was generally that of limited interaction in order to minimize the effects of the observer's presence on the interaction. At other times, during casual conversations, discussions and interviews with participants, the observer tended to move into the active control perspective in order to elicit particular information bearing upon the research.

The first two perspectives were dismissed on a number of grounds. The first perspective of watching from outside was clearly neither possible nor desirable in this kind of study. The second perspective of maintaining a passive presence was hardly more feasible since the study was expected to last for the entire school year. The staff could not be expected to tolerate the silent presence of the researcher for that length of time. More importantly, it was not considered that either of these two perspectives were likely to yield the kind of detailed information about the actions and intentions of participants that was required for this kind of research.

The term "participant observation" has been used in at least two senses in the literature. As the term is commonly used by writers in the area of field research, participant observation is a general term referring to any of the normal research perspectives and techniques of field research where the researcher maintains a lengthy and close interaction with his subjects. In the more precise meaning of the term, participant observation is held to refer only to those situations where the observer is a full participant in all organizational activities. The perspective of this research could be classified as that of participant observation under the first definition, but clearly not under the second. Since much of the literature uses the first definition of the term, this is how the term has been used in this dissertation.

The perspective of full participation was rejected as being inappropriate to the major purposes of the research. It was not the purpose of this study to facilitate the implementation of the Jordan Plan--simply to observe its implementation. Full participation would have forced the observer into a facilitative position.

It is an axiom of field research that the participant observer should share in the life activities and sentiments of people in face-to-face situations. The corollary of this axiom is that the role of participant observer requires both detachment and personal involvement (Bruyn, 1966:13-15). There is an implied paradox here--if it is not logically impossible to be both totally detached and totally involved at the same time, it is clearly extremely difficult. Most researchers are forced to compromise at one end of the two

poles. This is, the greater the degree of personal involvement, the greater the likelihood that the degree of detachment may be lessened, and vice versa. In this study, the decision was made to attempt to maintain the rigour of detachment, possibly at the cost of some loss of personal involvement.

A possible criticism of this perspective of even limited participation would be that it might be liable to observer contamination. While regarding this possibility seriously, it is not considered to be a major weakness of this study. Any method that might be used to study ongoing and complex social situations, such as the introduction of the Jordan Plan, poses special research problems. If field research creates disturbances, other methods tend to create artificiality. If normal research procedures are carefully applied, it is reasonable to assume that the presence of the researcher will eventually be normalized by the system members. Of course the phenomena under study will be different from the phenomena that might have occurred in the absence of the observer, if only marginally; but since there is no effective way of observing the latter phenomena, we must make the assumption that the disturbance caused by the presence of the observer is minimal (Schatzman and Strauss, 1973:58).

Data Collection

I. The model. Herbert Blumer describes two activities as constituting the necessary procedure in the direct examination of the empirical social world--"exploration" and "inspection" (Blumer, 1969:40-8). Exploration has two objectives: firstly, the researcher

should form a close, comprehensive relationship with the new sphere of social life, and secondly, the researcher should develop and reshape his inquiry so that his problems, hypotheses, and directions of inquiry should arise out of, and remain grounded in, the empirical life of the study.

The emphasis at this stage of the research is on flexibility. The researcher should be able to shift emphasis from one line of inquiry to another, and from one set of tentative hypotheses to another. This stands in contrast to traditional empiricism which demands a fixed and clearly structured problem statement in advance of the study, as well as a strictly predetermined collection of research techniques. The purpose at this stage of the research is twofold: to develop as comprehensive an understanding of the area of study as conditions allow, and to identify an analytical element, or set of elements, within the system which can be examined in more detail in the second phase of research.

Inspection involves a focused examination of the empirical content of whatever elements are chosen for purposes of analysis. A basic justification for choosing the action framework over the scientific empirical approach will usually be a dissatisfaction with the range of testable theories and hypotheses available. The major purpose of the exploratory stage is to study the full range of elements in a system in order to arrive at new problem statements. These new problem statements can be pursued in the inspection phase of the research. The end result of such research will seldom be a fully tested hypothesis. More likely, the research will have produced

some of the components of a "grounded theory" (Glaser and Strauss, 1967), and a range of testable hypotheses. The next stage in the process of inquiry will be to return to an empirical model of research to test these theories and hypotheses.

The research strategy pursued in this study conformed closely to Blumer's two phases. The exploration phase commenced with the entry of the researcher into the system in early September, 1973, and continued till the beginning of the second semester in January, 1974. This was a period of generalized field research--observing the early months of the Jordan Plan from a broad perspective, and gaining a familiarity with the system and its members. This involved a reconstruction of the events leading up to the implementation of the innovation, as well as the use of a number of research techniques to discover the response of the system to the innovation.

Out of this first phase of research came a closer definition of the research problem. In the inspection phase, lasting from January to the end of the school year in May, 1974, the researcher studied this problem area intensively. As a result of this study, the researcher was able to propose a number of research hypotheses, and begin to fit these into an overall theory of organizational change.

II. Exploration phase. The phase of exploration lasted from the moment the researcher entered the school system in early September to the commencement of the inspection phase in early January, 1974. The focus of research during this phase was both general and multiple: to gain a familiarity with the system and its members; to follow the day-to-day developments of the Jordan Plan; to study the reactions

of the various subsystems and the suprasystem to the Plan; to reconstruct the steps by which the system had come to accept the Jordan Plan. Out of this research it was possible to arrive at a more precise statement of the problem which was to serve as the necessary focus for the final phase of inspection.

A wide range of research techniques was used to obtain the data. They included: informal observation of the actions of teachers, administrators and students, and of the interaction among and between these groups; informal interviews with teachers, administrators, students and members of the community; attendance at staff meetings, social gatherings, parent-teacher meetings, School Board meetings, and numerous other gatherings; systematic observation of the role performance of key members of the system; self-administered questionnaires completed by students, teachers and parents; and analysis of documentary evidence from the School Board, the school administration, and from the local, city and national press.

The emphasis during this phase of exploration was to gain as broad a picture of the system and its operation as possible in the shortest possible time. At this stage the purpose was not to prove or disprove any hypotheses, and for this reason, certain liberties were taken with the conventional canons of methodological rigour in order to achieve a broader data base. For this reason, the information coming from these techniques was never regarded as definitive. The possibility of error was always present, and the data were analysed sceptically, with a view to identifying only the most general trends and directions of opinion.

The research techniques employed during this phase of exploration fell into a number of categories:

a. Informal Observation--Informal observation of the actions of teachers, administrators, students and Jordan Plan instructors was a vital component of the research process. The chief purpose of this technique was to provide a record of the implementation of the Jordan Plan, and also to gain an early impression of the impact of the new system on the various groups of system members. An example of this type of observation was the regular attendance by the researcher at staff meetings. This type of observation was continued throughout the year, even after the exploration phase had given way to the phase of inspection. However, the bulk of this type of observation was conducted during the first few months of the school year, while the researcher was attempting to understand the actions of system members, and while the system members themselves were adjusting to the altered schedule.

b. Systematic Observation of the Role Performance of Key Individuals--This kind of more intensive and structured observation tended to be restricted to members of the school administrative staff, and teachers whom the researcher came to perceive as highly influential within the system. Considerable time was devoted to observing the daily work patterns of the Coordinator of the Jordan Plan, and also of the involvement of the Principal in the Plan.

c. Informal Interviews--Whenever the opportunity arose, the researcher talked with individuals and groups inside the system. The purpose of these discussions varied depending on the particular

interest of the informant, and the day-to-day research focus of the researcher. An attempt was made to interview every teacher on an informal basis during the first semester. The purpose of this interview was, first of all, to establish a degree of rapport with each teacher. Secondly, the researcher wanted to discover each teacher's general orientation toward the Plan--whether they were satisfied with the way the Plan was developing, and the extent of their involvement with the Plan. The third and major purpose of these unstructured talks was simply to listen to what each teacher had to say--to learn to interpret the school and the Jordan Plan through the eyes of the system members.

These three data gathering techniques tended to become merged in the unpredictable flow of daily events. The researcher might be observing a group of teachers as they discussed some problem they were having, and then be drawn into the discussion with them. Or a discussion with the Principal or the Jordan Plan Coordinator might be interrupted several times by calls on their time, all of which could be observed by the researcher.

Recording the observations presented few logistic problems. While at the school the researcher tended to use the staffroom as a base. Following each discussion or observation session, the researcher would be able to return to the staffroom to record the key impressions. At any time of the day there would normally be at least one or two teachers in the staffroom, reading or writing, and these recording activities seemed to arouse little interest among the teachers.

The major problem, and one which affected the whole year of

research, was the shortage of time. A school, by its very nature, poses certain problems for the conduct of field research. For most of each working day the public areas of a school are empty, with the students and teachers out of sight in their classrooms. Discussions with teachers and students are normally conducted during spare periods or during recesses. The four day instructional week imposed a number of serious restrictions on the research. The new schedule effectively precluded any but the most fleeting discussions with teachers during the four instructional days. With a morning recess of ten minutes and a lunch break of only half an hour, it was not possible to engage teachers in any discussion during these times. Furthermore, the altered schedule had completely removed the spare periods. The only time when the researcher could be sure of being able to interview either teachers or children was on Wednesday. For this reason, the researcher found it necessary to be present at the school every Wednesday throughout the year. Conversely, it was not found to be useful to be present at the school during regular teaching days, except when the particular research purpose involved studying a regular teaching day, or when the intention was to focus on the administrative personnel.

Even attending regularly every Wednesday, it was not possible to talk at any length with all 29 teachers during the first semester. However, at least 22 teachers were interviewed, and the remainder were spoken with on a casual basis.

d. Attendance at Meetings and Other Gatherings--The researcher attended a number of meetings and other gatherings in order to make closer contact with the parent and community groups. In the early

stages of the research, the main purpose was to introduce the researcher to the parent community, and to invite their individual or collective reactions to the Jordan Plan. During the first few months, the researcher attended a Parent-Teacher evening, a public meeting called to discuss the Jordan Plan, a school Open Day, and several School Board meetings. It was intended that information and insights formed at this stage might be used as the basis for a fuller investigation of parental interest and participation later in the year.

e. Record of Media Coverage--A running record of media coverage was maintained throughout the year. There were two reasons for this: firstly, to keep a record of the kind of information that was being released to the public, and secondly, to obtain some indication of the reaction of the system itself to this kind of publicity.

f. Instrumentation--A number of questionnaires were administered to various members of the system and suprasystem. These questionnaires were not the major components of the study, but were designed merely to obtain some rough indication of the participation, interest level, and concerns of various groups.

Three questionnaires altogether were administered by the researcher:

(i) Questionnaire to Students I--It was considered desirable to gain an early impression of the levels of participation and interest of students in the Jordan Plan. The objectives of this questionnaire were: to discover the nature and level of participation of students in the various Jordan Plan activities; to find out how students were spending their time on Wednesday during normal school hours; and to

obtain a rough indication of student preference for the Jordan Plan.

With these simple objectives in mind, the questionnaire was kept deliberately short and straightforward. A rough draft was prepared and submitted to a group of doctoral students in educational administration for comments concerning layout. It was then submitted to a group of teachers and administrators in the school system to get some indication of face and content validity. A more systematic pilot testing of the instrument was not considered feasible in view of the time-specific nature of the questionnaire. Since the instrument was intended to measure student participation on a particular day, September 28, any subsequent test for reliability would also be meaningless.

The questionnaire was administered during the homeroom period at 9:00 a.m., Friday, 28 September. The regular homeroom teachers had agreed to administer the questionnaire, and they had already been briefed during an earlier staff meeting concerning the nature of the instrument and the way in which it should be administered. This information was repeated in a printed sheet of instructions sent to each homeroom teacher along with the questionnaire forms (Appendix A).

(ii) Questionnaire to Jordan Plan Instructors--A questionnaire form was also prepared and administered to the Jordan Plan instructors, September 27, 1973 (Appendix B). The objectives of this instrument were even more modest than those of the student questionnaire. The researcher wanted to obtain data on course registrations, and to obtain an early impression of the reaction of instructors to the way

the Plan was operating. This was the only occasion that this sort of instrument was used to obtain information from the Jordan Plan instructors. At this early stage in the year, the Jordan Plan Coordinator himself did not have this information, and both he and the Superintendent had expressed interest in having it. For the remainder of the year, information concerning courses and registration numbers could be readily obtained by consulting the Coordinator, and the reactions of the instructors could be obtained more effectively by personal contact by the researcher.

(iii) Questionnaire to Students II--A second questionnaire was prepared and administered to the students, March, 1974 (Appendix C). The objectives of this questionnaire were similar to those of the first questionnaire in September. It was hoped that data from this questionnaire would enable a comparison to be drawn between the levels of interest and participation of students at the beginning of the school year and towards the end of it. By the time this second questionnaire was administered, the research had progressed on to the phase of inspection. Information from this questionnaire was no longer central to the concerns of the study. However, the administration of the school system had expressed some interest in another survey of student involvement, and indirectly, the reaction of the student body could be seen as having some bearing on the new focus of concern.

Although the phase of inspection began in January 1974, it never completely replaced the earlier phase of exploration. Even after a focus for the research had been chosen and pursued, it was

still important to monitor system behavior at a more general level. This second questionnaire to the students was part of this continuing phase of exploration.

In addition to these instruments designed and administered by the researcher, there were a number of other relatively systematic attempts by members of the system to obtain data on various aspects of the system. Since data from these instruments yielded information of some value to this research, and since the findings from these instruments constituted important feedback into the system, these instruments and their findings were considered in this study.

(iv) Questionnaire to the Staff (I)--A questionnaire was drawn up by the Principal of the school and administered to all teachers on the staff, 24 October, 1973. The 12 item instrument asked the teachers to compare the new four day schedule with the former five day week on a number of different variables. The teachers were asked to record their responses on a three point Likert-type scale (Appendix D).

(v) Questionnaire to the Staff (II)--Later in the year, a teacher at the school wanted to use data from the Principal's questionnaire to assist in the preparation of an article for the local teachers' association publication. Instead, on the suggestion of the Principal, the teacher administered a second questionnaire to all teachers, 23 January, 1974. The teacher, wishing to replicate the first questionnaire as closely as possible, made few changes in constructing the second instrument (Appendix E).

These questionnaires were not particularly scientific instruments,

and they contain a number of grammatical, typographical and construction errors. However, the members of the system treated the results of these instruments as having some validity, and for this reason, they should be included in this treatment.

(vi) Telephone Survey of Parents--A public meeting was held at the school, 21 November, 1973. The purpose was to discuss the development of the Jordan Plan with the parents and other interested members of the community. A committee of parents was formed to investigate the attitude of the total parent group towards the four day week. Present at the meeting were a number of undergraduate students from the university who were attending as part of a class activity. At the conclusion of the meeting they volunteered their assistance to the committee in conducting a survey of parents' opinions regarding the Jordan Plan. This offer was accepted, and working with the committee, the students carried out a telephone survey of 140 households. This represented a sample of approximately 25 percent of the households in the total parent population. The sample was chosen by contacting every fourth page in the school's register of parents.

The survey took the form of a brief interview schedule asking each parent a number of questions concerning his or her attitudes toward various aspects of the new schedule, and inviting their comments on any aspect of the plan (Appendix F). The sample was divided up among the eight members of the committee and the four members of the student group, each person telephoning about one dozen households. Most of the interviews were completed by the middle of

December, and all had been completed by Christmas.

CHAPTER 3

ANTECEDENTS TO IMPLEMENTATION

The Setting

Jordan High School was a junior/senior composite high school in the Jordan School District. Jordan was a township of approximately 20,000 people situated just outside the corporate limits of a major city in Alberta. The township had grown up over the previous 20 years to serve a growing demand for housing in the city. It was constructed outside the city to capitalize on cheap land costs and more favorable rating structures within a neighboring county. By 1973, although land costs were still not exorbitant by city standards, most of the residents owned their own homes, in contrast to a high proportion of renters in the city. This fact had contributed to a relatively homogeneous, middle-class population. Owing to the rapid growth of Jordan Township over the previous few years, the majority of homeowners had school age families.

The Jordan School District had been in existence for only 12 years. In fact, the first class of grade one children, admitted in 1962 by the newly formed school board, graduated from Jordan High School in 1974. The development and current situation of the school district was typical of any relatively new, rapidly growing urban system. In 1964 the district had just one elementary school, with a roll of 280 students. Jordan High School was opened in 1969, a second elementary school followed two years later, and a third opened

in September, 1973. Student enrollment had increased in those ten years from 280 in 1964 to 1,806 in June of 1974. This represented an average annual increase of 20.5 percent in student enrollment. A survey conducted by the Board in the Fall of 1973 indicated that another elementary school would be needed within a year, and long term forecasts indicated that Jordan High School would not be able to contain the number of students of junior high school age after the 1973-74 school year. Consequently, the grade six graduates from the system's three elementary schools who would normally have transferred to Jordan High would be kept in their elementary schools for grades seven and eight, starting in the 1974-75 year. Under the press of numbers, Jordan High School was in the process of changing from its composite status into a normal senior high school. This transition was to take at least three years, although the Board, as of the 1973-74 school year, had not made definite plans for this far ahead.

This rapid growth had been fostered by a Board with only limited funds at its disposal. For the first few years of its existence, the Board exercised its right under the Education Act not to employ a Superintendent. For nine years the senior officer of the Board was the Secretary-Treasurer. The current Superintendent, the first to hold this office, had been appointed at the beginning of the 1972-73 school year. The average expenditure per child was \$854.00 for the 1973 financial year. This figure was nearly one hundred dollars below the provincial figure of \$950.22 per child. To tighten the financial situation still further, the Board was

committed to spending 18 percent of its total expenditure on debt service, and another five percent for deficit recovery.

Since its beginning, the Board had been fully committed to meeting the financial demands of maintaining the essential educational services of the school district. New schools generally take several years to equip properly, and the Jordan School District had five new schools. At the end of the 1972-73 school year, Jordan High School had been in operation for four years. The structure itself was adequate, if not elaborate. It boasted a gymnasium, library, industrial arts laboratory and home science laboratory. However, there was no cafeteria, the science laboratories needed considerable remodelling, and the grounds needed a great deal of work. The equipment was barely adequate in some areas. There was a serious shortage of science and social studies materials, and the library was generally inadequate for most high school research purposes. The gymnasium had very little heavy gymnastic equipment. The school was also very short of audio-visual equipment, though, with the appointment of an audio-visual consultant to central office in September, 1973, this situation promised to improve somewhat.

This was a Board fully committed to an expensive program of school building, with only very limited funds available for special projects and non-essential items. Inevitably Jordan High School had suffered from this shortage of funds. For many years, the range of programs and activities that could be offered to the students had been severely restricted by the shortage of money.

The Origins for the Four
Day Week

The original idea for a four day week came from one of the senior teachers at Jordan High School. Since the form and purpose that the four day week ultimately took were quite different from the way in which it was originally conceived it will be useful to describe this early period in some detail.

Mr. Shannon was a teacher in his thirties. At the beginning of the study he had been teaching for a total of eight years, and was one of the founding teachers at the school. Some time during the 1970-71 school year, Shannon became aware of a plan being developed to introduce some form of four day week at a neighboring city high school. The objective of this proposed change appeared to be one of simple economy. The school in question had an extensive busing program, and it was anticipated that a four day school week would reduce the cost of this program considerably. As Shannon understood the plan, the school would work on a compressed timetable for the first four days of the school week, and Friday would be a free day.

The idea "registered" with Shannon because most of the students at Jordan High had to be bused to school. Knowing that the Board was having some financial problems, he thought that a lot of money could be saved by moving to a four day week. At this stage the Plan was no more than a casual idea in the mind of one teacher. However the novelty of the four day week idea interested Shannon sufficiently to prompt him to think the idea through further. The first change in the idea came when Shannon realized that the free

day should not be Friday. From the very beginning Shannon was aware of the problems of "selling" the idea to the School Board and to the community. It was unlikely, he thought, that the Board would agree to making Friday a holiday. It would make it too easy for the community to question the motives of the teachers, and to suggest that the sole purpose of the four day instructional week was to provide a three day weekend. This left the choice of day to Tuesday, Wednesday and Thursday. Wednesday suggested itself immediately as offering a convenient break in the middle of the week. At this point, the question of economizing on busing became a very secondary consideration in Shannon's thinking. More important was the new thought that a four day instructional week, with a break in the middle of the week, would be an "easier teaching week." The busing became "merely an extra in the attempt to sell it to the Board" (Recorded Interview).¹

Shannon began to discuss the idea casually with some of the teachers at Jordan, and met with a favorable reaction. Most of the people he talked with liked the thought of a free day on Wednesday and seemed to think that they could manage the extra hours on the other four days. Even at this early stage, Shannon did not see the Wednesday as being merely a holiday for the staff. As far as he was concerned, it should be a day when teachers would be free to come in to school to complete many of the non-teaching duties that there was

¹ All quotations indicated in this manner were from transcripts of recorded interviews with teachers and administrators. Further identification has been avoided to maintain the confidentiality of the sources.

never enough time to do during a regular teaching week. Again, Shannon thought that this would be important in selling the idea to the Board. The teachers he spoke with seemed to think that this would be reasonable, although these discussions were never very explicit about whether attendance on Wednesday would be voluntary or not. At some time during the 1970-71 school year, Shannon discussed the idea with the Principal. The Principal liked the idea, and he and Shannon discussed various ways of presenting it to the School Board. At the time there was no Superintendent of Schools, and teachers had sometimes found it difficult to approach the Board directly with new ideas. However, nothing materialized out of these discussions with the Principal, and the Board was not approached. The Principal left at the end of that year, and the idea lay fallow for another two years.

Early in the 1972-73 school year, detecting a more receptive atmosphere in the system, Shannon began to reconsider his idea for a four day school week. In his opinion, the Alberta Department of Education was "pushing innovation" to a greater extent than they had been two years before, and might be expected to support any educational innovation whose worth could be established. Furthermore, the Board had appointed its first Superintendent at the beginning of the 1972-73 school year. The new Superintendent came to the Jordan School District with something of a reputation as an innovator. Shannon knew something of his record at two city high schools where he had been Principal, and he anticipated that the Superintendent would encourage any worthwhile innovation that would move the

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educational process in the direction of increased flexibility.

The Board itself had changed both in composition and approach over the previous two years. Now there were several Board members who had some experience in teaching, and actively favored innovation in the school system. The Board also appeared to be accepting the guidance of the new Superintendent on most professional and curriculum matters. Finally, the new Principal, appointed in 1971-72, employed a non-directive style of leadership, and seemed open to suggestions for change.

As Shannon reconsidered the idea of a four day week he thought of other "arguments" which might help to persuade the teachers of the merits of the scheme. As he discussed the idea casually with other teachers, the following arguments began to take shape:

1. A problem that had confronted the staff of Jordan High for several years was that of field trips. It was generally considered among the staff that field trips were a desirable, and even a necessary, adjunct to the main program, particularly in view of the relatively isolated location of the township of Jordan. However, virtually all field trips took at least half a day, and caused considerable disruption to other scheduled classes. An important argument in favor of a four day week was that all field trips could be scheduled on Wednesday when there would be no problem of conflicting with other classes.

2. Another problem, and one related to that of field trips, was the shortage of library materials at the school. The school library

was inadequate for most high school research purposes, and since Jordan Township did not have a library, many high school students were in the habit of absenting themselves from school, with or without permission, in order to travel in to the city to use the larger libraries there. While accepting the necessity for students to gain access to good library facilities, many teachers were concerned at the amount of class time being lost by some students, and the disruption caused to their classes by the many absentees.

It occurred to Shannon, and to the other teachers whom he approached, that absenteeism attributable to this cause could be done away with if students were able to use Wednesday to make these trips in to the library.

3. Having had their attention drawn to the problems of student absenteeism, some teachers began looking for other ways in which a free Wednesday might relieve this problem. Like any other school, Jordan High had a problem with students taking school time to visit doctors, dentists and other specialists. The extent of this problem, although not effectively documented by the school authorities, may have been exacerbated by the distance students had to travel for consultations in the city. In any event, teachers anticipated that students would be able to make the bulk of these kind of appointments on Wednesday, and in this way reduce the amount of disruption and lost class time.

4. The free Wednesday also suggested itself as a good time for students to complete assigned work in an unstructured setting. It was anticipated that students could either stay at home, or come to

school to do this work. At school teachers might be available to assist with individual and small group tuition. Teachers might also be available to counsel individual students, and to conduct interviews with parents in a less hurried manner than was possible under a five day school week.

At this stage, all these arguments centred on the teacher. The original objective of decreasing the cost of the busing program had been discarded early in the 1972-73 school year when it was realized that a four day week at Jordan High would not reduce the busing cost at all. The buses would still have to run their regular routes, at the regular times, in order to transport students to and from the three elementary schools in the district. By the end of the Fall Term, 1972, the objective uppermost in Shannon's thinking "... was basically to make the instructional week easier for teachers and to make it easier for students to complete assigned work" (Recorded Interview).

At this point, Shannon approached Mr. Hewit, another senior teacher on the staff, to seek his support for the proposal. Hewit had been at the school only two years, but, through his heavy involvement in church affairs, community affairs and extra-curricular activities in the school, had become one of the most influential members of the staff. Shannon realized that Hewit's support for the idea would tend to increase the confidence of the Board and the community in the scheme.

Shannon outlined the structure of a four day school week to Hewit. Under the five day week there were seven 40 minute periods

per day. Under a four day instructional week, there would still be seven periods per day, but of 50 minutes each rather than 40. The extra time would be made up by cutting the length of the morning and lunchtime breaks to 10 minutes and 30 minutes respectively. By cutting out all spare periods the school would still be able to offer 1,400 minutes of instruction under a compressed instructional week.

Hewit liked the idea, though his reasons for liking it were somewhat different from those of Shannon:

1. Hewit anticipated that the four day week would put more pressure on both staff and students to fulfill the academic requirements of the syllabus, and he was in favor of this. He firmly believed that students only gave of their best when under some form of pressure, and he saw the four day week as one way to apply this pressure.
2. He also realized that the compressed week would free both the teacher and the student to indulge in activities other than teaching and learning. The main benefit he saw arising out of a four day week was a better balance between the academic and the non-academic sides of the curriculum. He believed that much of the useful time spent by teachers was outside the classroom, interacting with the students in sports and other less academic pursuits. A four day instructional week, he believed, would increase the amount of non-teaching time a teacher would be able to spend with students.
3. Another aspect of a compressed teaching week that Hewit found attractive, was the increased potential for intradepartmental

organization and cooperation. A system of subject area coordinators had been attempted at the beginning of the 1972-73 school year, but had been abandoned owing to a contract dispute. It was intended that the system would be revived for the start of the 1973-74 school year. Under the proposed system, five of the senior teachers were to be designated coordinators in their respective disciplines. Hewit anticipated that the new system of subject coordinators would be greatly facilitated if teachers were available for planning and organization sessions on Wednesday.

4. Hewit had a particular interest in character development. He believed that many aspects of character development would be enhanced if the school had a more positive and definite identity. Recognizing that every new school must battle to establish its own identity, Hewit had devoted considerable attention to the problem of fostering the development of such an identity for Jordan High School.

Hewit believed that the school "... needed something to make both the teachers and the students proud of the school. Something based on the dictum 'Dare to be different.'" He saw the four day week as "... a way of pushing the high school so that it didn't become just a symbol of sporting excellence, but also a symbol of progressive education" (Recorded Interview). By achieving this, the school would provide something worthwhile for the students to identify with and take pride in.

At this early stage, there was a clear distinction between the objectives Shannon saw for a four day week, and those that Hewit envisaged. Broadly speaking, Shannon saw it as an opportunity to

facilitate the instructional program by rationalizing the time spent in and out of the classroom; Hewit saw it as a way in which the students could find time to engage in activities beyond the instructional program. At the time, the growing variety of goals and objectives for the Plan were perceived as being summative, and therefore positive, rather than confusing, or even possibly mutually contradictory.

The Principal was then approached with the idea. He liked the advantages as they were outlined to him, and he was tentatively satisfied with the feasibility of the scheme. Having discussed the technicalities in some greater detail, the Superintendent was approached. He too was attracted by the apparent advantages of a compressed instructional week. However, he suggested that the Plan would have to be modified before he would give his support to it. Up to this time the idea of a four day week was very much oriented towards the convenience of the teacher. That is, most of the objectives that had been proposed, and the advantages that had been foreseen, were based on Shannon's original general goal of making the teaching week a bit easier for the teachers. The Superintendent appreciated this objective, but insisted that the Plan must be shown to be of some real advantage to the students before he would take the idea to the Board. He suggested, instead, that the Plan would have to be presented to the Board as being primarily good for the students, and only incidentally good for the teachers. Furthermore, he was concerned that there would be some form of supervised activity available to students on Wednesday. It was at this point that the

Wednesday program of activities began to appear as one of the objectives of the four day instructional week. With this issue resolved the Superintendent stated that he would be prepared to support an approach to the Board if it could be shown that there was total support from the staff.

Early in February, Shannon and Hewit presented the Plan to the rest of the staff at the monthly staff meeting. The arguments in favor of a compressed week were advanced, and the teachers were allowed a month to consider their decision. Meanwhile, the Superintendent checked with the Department of Education, and The Alberta Teachers' Association to ensure that a four day week would be acceptable under the law. The Department assured him that the regulations governed the total instructional time each child should spend in school each week, but placed no restrictions on how this time should be scheduled. The Alberta Teachers' Association's response was to place the onus of decision on the teachers themselves. If the staff of Jordan High were fully informed about the scheme, and wanted to proceed with it, then the Association would not interfere. Some concern was expressed that the teachers should not be morally coerced into accepting any plan that would mean a significant increase in workloads. It had been the experience of the Association that teachers frequently agreed to innovations which resulted in an increase in their workload either out of a sense of loyalty to the school, or from initial enthusiasm over the innovation.

Also in February, the Superintendent began the first tentative planning for a series of optional activities which would be available

for students on Wednesday. Jordan Township had its own Recreation Centre, with a fulltime professional staff attached. The Superintendent received an enthusiastic response to his inquiries, and he was assured that the Centre could supply instructors for courses in a variety of activities.

Early in March the question of a four day instructional week was discussed more fully by the staff. Mention was made of the fact that there might be some form of activity program available to students on Wednesdays, but no clear indication was given as to the nature or scope of these activities. In view of the teachers' reactions, both during this meeting and subsequently, it appeared that only a few teachers foresaw these activities as likely to constitute an important part of the four day week scheme.

The overall reaction of teachers at this March meeting was positive. Most teachers liked the thought of spending one day in the work week out of the classroom. Apart from the advantages previously stated, it was also suggested that the four day week would cut down on the amount of supervision that each teacher would be required to do. With shortened morning and lunch breaks, the supervision problem would be greatly reduced. Under the five day instructional week the students in the junior high grades had an 80 minute break, while the senior high students only had 40 minutes. The problem of supervising the junior high school students during this extra 40 minutes had been quite acute, particularly during the winter months. Another advantage related to supervision: teachers had been complaining about being asked to give up their preparation

periods in order to supervise classes for absent teachers. It was clear that under a compressed teaching week, these extra supervision duties would disappear.

While the general reaction was positive, there were a number of questions that required clarification. Many teachers thought that under a compressed work week they would be ~~required~~ to do more work than usual. They were assured that the four day week was merely an attempt to rationalize and restructure their present work hours to allow more efficient use of that time. It was explained to the teachers that they would be required to come to school from 9:00 a.m. till noon each Wednesday. It was suggested that these three hours be thought of as the equivalent of the number of hours teachers were currently spending in preparation periods. Wednesday mornings would be available for general staff meetings, individual and group planning and coordination, parent and student interviews, and tutoring. Teachers would be free to leave at 12 noon.

A few teachers resented this aspect of the Plan, and expressed the opinion that, having fulfilled their teaching obligations on the other four days, their attendance should not be required on Wednesday. It was explained to them that the principal reason for asking them to attend school on Wednesday morning was to avoid any suggestion in the community that the teachers were "doing less work for the same pay."

Many teachers were also concerned about what ~~they~~ they would be required to do on Wednesday morning. There was an almost universal reluctance to assume any supervisory duties on Wednesday. They were

given to understand that the teachers would not be responsible for the students on Wednesday, that any recreational activities that were organized on Wednesday would be run by people from the community and that teachers would be completely free to spend Wednesday mornings at the professional activities outlined earlier.

At the end of the meeting, a secret vote was taken to determine the extent of support among the staff for proceeding with a four day instructional week in the 1973-74 school year. Only those teachers who expected to be teaching at the school that following September were permitted to vote. Of the 24 teachers who voted, 21 were in favor and only three were opposed to the introduction of the four day week.

The next step was to seek the approval of the School Board. At a meeting on April 9, 1973, Shannon, Hewit, the Principal and the Superintendent presented the scheme to the Board for consideration. As the Superintendent had anticipated, the Board's immediate concern was the advantage to the students and the community from such an innovation, rather than the earlier emphasis on the advantages to the teachers. To balance the teachers' presentation, the Superintendent was able to outline a number of objectives of a four day week which were more likely to win the support of the Board.

Jordan High School was a relatively small school with a staff of fewer than 30 teachers. Over the previous few years, the school had found it extremely difficult to offer a good option program. Owing to the small size of the school, the administration had a problem scheduling a wide selection of options, and similar difficulty

in finding a sufficient number of specifically talented teachers to conduct them. Wednesday could be used to supplement the option program by making it possible to organize a program of recreational, cultural and sporting activities for the students to engage in. Instructors for these activities could be found from a variety of clubs and organizations in Jordan Township. As it was presented to the Board, these activities would combine the two objectives of providing a more even balance between the academic and non-academic sides of the curriculum, and also of involving members of the community in their own school. It was pointed out that any such program of Wednesday activities would have to be optional for the students because they would already have fulfilled their legal attendance requirements on the other four days. It was also suggested that the shorter instructional week could reduce the expense of cleaning the school on Wednesday. Larger maintenance jobs might more conveniently be carried out on Wednesday when the school would be largely empty.

The Board expressed interest in the proposal, but asked for a more formal presentation of the scheme before making any decision. At the next meeting, the Board agreed to allow the Superintendent to put the scheme to the students and the community for their consideration. During the next month considerable effort was made to inform both the students and parents of the nature of the proposal.

Hewit, Shannon and the Principal selected six students, one from each grade level, whom they thought were leaders, or particularly influential among their peers. The idea of a four day instructional week was presented to them, and they reacted positively towards it.

This group was then asked to go back to the other students and "get the word spread around." Then each grade level was assembled, one at a time, in the large lecture theatre, and the scheme was described at some length to them. The students' reaction was overwhelmingly positive, although a number of senior high school students did express some concern at the compressed teaching day. A few students wondered if the longer day would prove too tiring.

Having received the Board's approval in principle, and having aroused the interest and enthusiasm of the students, the next task was to inform the parents. A similar procedure was followed to that used to inform the students. The Superintendent, Principal, Hewit and Shannon spent almost a month attending small meetings of parents, and approaching influential individuals, attempting to inform the parent community of the scheme. There were a number of community organizations which maintained quite close contacts with the school, including a Jordan High School Booster Club, and the Superintendent's group was able to influence a large number of parents simply by attending the regular meetings of these organizations and making a small presentation on the scheme. Again, the general reaction of these groups appeared to be favorable, although some individuals expressed minor annoyance that the parents should have been the "last ones to be told" about the Plan.

These small meetings were only a preliminary to a larger public meeting at which the feelings of the parent community could be more accurately gauged. This meeting was scheduled for May 31, and considerable effort was made to ensure that every parent knew about it.

Announcements were made over the radio and television, and advertisements were placed in the press. The Booster Club undertook to phone every student's home in order to ensure total coverage.

Prior to the meeting neither the Superintendent, nor the staff of the school, had any clear idea of the likely response from the parents. They anticipated that in a community like Jordan, where a sizeable proportion of the mothers held jobs, there could be strong opposition to any attempt by the school to give the students the option of attendance at school on Wednesday.

The meeting was held in the large lecture theatre at the school and over 200 people attended. Although this number represented less than half the total number of parents, it was also the largest attendance at any meeting previously held by the school. The Superintendent gave an outline of the proposed innovation, illustrated by overhead transparencies. By this time, the official objectives of the Jordan Plan had been consolidated into a six point statement. Specifically, the Jordan Plan was designed to meet the following objectives:

1. to make total research facilities more readily available to the students. Public libraries, university facilities, industrial plants, etc., are more readily available during the normal working day. The plan allows for these experiences.
2. outdoor education, field-trips, be they in the area of the sciences, fine arts, culture, etc., should not impinge on others. They are experiences which are most easily gained during the day. For example, a visit to the Legislative Assembly to observe government in action. However, the group leaves behind students whose classes are minimized due to classes being missed, and the accompanying teacher leaves classes that must be managed by other people. The plan facilitates these experiences.

3. to allow for greater parent and community involvement in the school. The school day is so fully scheduled that it is nearly impossible to allow community agencies to share their talents. These services then are on an after school basis or weekends. This is after major energies have been expended at school, or when not all young people are free to participate for various reasons.
4. to facilitate professional services. Students invariably miss classes for medical, dental, driver-examination, etc., appointments. The Jordan Plan would allow most of these to happen during regular business hours without having to miss class time.
5. to facilitate parental consultation. In order for a parent to consult with a teacher during a working day, teachers generally need to be called out of classes. Thus the rights of one are infringing on the rights of another. The Plan will alleviate this problem.
6. to provide more effective planning time to teaching staffs. Teachers now get a so-called preparation period daily. However, when a teacher has this period, other members of his department may be teaching (Appendix G).

Following this presentation, the Chairman of the Board, the Superintendent, the Principal, Hewitt and Shannon, acted as a panel to answer questions from the parents. From the barrage of questions it appeared to the panelists that there were almost as many parents who opposed the Plan as those who supported it. Parents were concerned that the teachers might do less work under a compressed teaching week, that their children would have less time for conventional school work, and that students would need some form of organized supervision on Wednesday. However, when it was finally put to the vote, allowing one vote per household, out of the approximately 130 votes cast, only 13 were opposed to the Plan.

At its next meeting, the Board approved the introduction of the Plan for September 1973, with the following two qualifications. Firstly, the Board would not undertake to meet the costs of any

Wednesday activity program, and therefore the program would have to be economically self-supporting. Secondly, the Board stipulated that a committee of parents be struck to conduct an evaluation of the program in operation.

The meeting of May 31 was virtually the last direct input by the teachers to the planning process until school recommenced at the beginning of September. During the summer, most of the planning and organization for the Plan was done by the Superintendent himself. However, before the end of the 1973-74 school year, there was one further development of significance among the staff. During May and June, a small group of teachers began to become concerned over the way the Plan was developing. As the idea had originally been presented to the staff, the main purpose of introducing a four day week had been to enable the teachers to do their jobs more effectively. A strong "selling point," as far as the teachers were concerned, was the prospect of being able to organize groups of students, to conduct special projects, and to conduct field trips on Wednesday. The Wednesday activity program was a later addition to the Plan, and certainly not central to the scheme the teachers had agreed to. While the majority of teachers seemed to have no objection to the Plan as it was developing, and most of them wholly supported the principle behind this sort of activity program, a few teachers foresaw a conflict between these two aspects of the Plan. Their concern was muted, however, and the problem did not take shape until the Plan was actually introduced in September.

Just prior to the end of the 1972-73 school year, the students

were asked to complete a survey sheet to determine the level of interest in a number of activities which might be included in a Wednesday program. From his inquiries in the community, the Superintendent had compiled a list of 32 activities for which there would probably be some form of instruction available. Students responded enthusiastically, and over 200 of them indicated that they might participate in the most popular activities, such as horseback riding, swimming, defensive driving and cycling. Using the results of this survey as a rough guide, the Superintendent began to plan the Wednesday program in more detail.

Instructors were to be recruited from among the parent group, from clubs and societies such as the YMCA and the St. John's Ambulance, from senior high school students, and even from the teaching staff of the school. Community involvement in the Jordan Plan had become an important objective of the Plan it seemed. In fact, at the general meeting on May 31, the Superintendent had invited members of the adult community not only to conduct some of the Wednesday courses, but actually to register in any of the courses that interested them. As the Plan began to take on more of the character of a community project, the Superintendent realized that it would be advisable to establish some more formal relationship with the local Recreation Centre, and with the Department of Culture, Youth and Recreation.

In early July, the Superintendent visited the Minister of Culture, Youth and Recreation. His reason for the visit was to inform the Minister of the proposed innovation, and of the large scale community involvement he envisaged in the Wednesday activity

program. He also hoped that the Minister would cooperate in the use of some of the personnel from the Jordan Recreation Centre in some of the activities. The Minister expressed interest in the Plan, and suggested that there might be funding available for the hiring of a fulltime coordinator for the Wednesday activities.

Within a few days the Superintendent had prepared a more formal presentation and made an application for funding (Appendix G). At the time of making the application for funding, planning for the activity program was still at the tentative level. However, the Minister approved the Plan, and at a meeting on August 7, the Superintendent was able to convey the Minister's offer to the Board. The grant would cover the salary of a fulltime coordinator for the Wednesday activity program for the 1973-74 school year.

The position was advertized and filled within a week. The successful applicant was male, aged 32, a qualified teacher of physical education, and working part-time on a university degree. The gross salary of \$6,250 constituted a drastic reduction in salary for this individual. He had been involved in recreational projects of a similar, if less ambitious, nature before, and he was attracted to the job at Jordan High School purely for the challenge it offered him. From the beginning of his appointment it was understood that his appointment could be terminated within a month's notice in the event of the project failing; conversely, the Superintendent was aware that it was highly unlikely that this individual would remain in the job for longer than the first year of operation.

CHAPTER 4

IMPLEMENTATION OF THE JORDAN PLAN

By the time school recommenced on September 2, 1973, the newly appointed Coordinator of the Jordan Plan had organized a program of 29 separate activities for Wednesday. Most of these courses were intended to run for eight to ten weeks, allowing the students an opportunity to register for another set of activities some time in November.

Each course was intended to be economically self-sufficient. That is, the cost of providing equipment and facilities, and the expense of the instructors' fees were to be met from the fees charged to the students. This practice resulted in a wide range of fees. The two most expensive courses were horseback riding at \$25 and driving lessons at \$48; there were several courses such as swimming, defensive driving, weaving and oil painting for approximately \$10; and the bulk of the remainder were either free or just one or two dollars. There appeared to be two reasons for this wide discrepancy in the fees charged for each course: some courses such as horseback riding, driving lessons and swimming involved the hire of outside facilities and professional tuition; each instructor was allowed to set his own fee structure, and while some chose to volunteer their services, others charged as much as one dollar per child per lesson (Appendix H).

The new compressed instructional schedule started on the

first day of the 1973-74 school year. However, the Wednesday of the first week was a regular instructional day rather than a free day. The Superintendent considered that it would be very poor public relations to allow the students a free Wednesday until the Wednesday activity program could be set in motion. When the teachers heard of the decision, there was some initial bad feeling until the Superintendent could explain his reasons to them personally. Most of that first Wednesday was taken up with the registration of students for the activity program.

None of the administrative personnel had any clear idea of the likely response from the students. The Principal anticipated that only about 30 percent of the students would register in a Wednesday course, while the Superintendent thought it unlikely that there would be more than 500 registrations, even counting those students who would register for more than one course at a time. In fact, the heavy response of the students seemed to surprise everyone; over 70 percent of the students registered, most for more than one course, and many of them for three or more courses at once.

The Viewpoint of the Coordinator

For the first few weeks, the Coordinator was extremely busy. One of the biggest problems was organizing the busing schedule. Many of the activities such as horseback riding and swimming took place outside the school, necessitating a fairly extensive transportation schedule. A number of courses were still only partially organized when Wednesday activities commenced on September 12, and this tended to produce a number of problems for the Coordinator. Small groups of

students would approach him and express an interest in some new activity and, where it was possible, the activity would be provided. Timetabling also proved to be a problem. The early attempts had to be revised to accommodate the large number of students who were registered for more than one course. For the first few weeks, he visited each course to check on facilities and general operations. He also spent a considerable amount of time with groups of students, encouraging them to participate in various activities.

When the Coordinator was first appointed, it was the Superintendent's intention that he should be regarded as one of the staff, and that he should come under the general direction of the Principal. However, the pressure of the first few weeks served to establish a role pattern significantly different from that envisaged by the Superintendent. This role pattern was to continue with few major changes for the duration of the year.

Within the first few days of term, it became obvious that the Coordinator would need an office of his own. Prior to this time he had been working at a table in the staff room. The Principal offered him the use of an office adjoining his own office and that of the Vice-Principal. While this may have been necessary from the perspective of efficiency, some of the senior teachers were somewhat taken aback to find the newly appointed Coordinator in an office superior to their own. There was also some confusion among the staff concerning their relationship with the Coordinator and with the Jordan Plan generally. As they had understood matters at the end of the 1972-73 school year, the four day instructional week was a plan

conceived and instigated by themselves. On their return to school in September, they observed that the whole program was being organized by the newly appointed Coordinator. The perceptions of the teachers are treated at greater length in a subsequent part, but some mention of the teachers' reaction to this situation is needed here in order to understand the Coordinator's response.

At the beginning of the school year the Coordinator had little time to establish a working relationship with most of the members of the teaching staff. Within a few weeks of taking up his job he became aware that the Wednesday activities as they were taking shape were not as the teachers had envisaged Wednesday being spent. He was also aware of some psychological distance, even frostiness, between himself and some of the teachers. However, he considered that the problem was not of his making; he had been hired to develop a program of recreational, sporting and cultural activities, and he was fully occupied doing that.

The pressure of work at the beginning of the school year also tended to distort the official line of command. As issues arose which needed immediate action or policy decisions, the Coordinator found it quicker to telephone or visit the Superintendent rather than go through the Principal's office. The Superintendent had played a leading part in getting the Jordan Plan started, and he retained an active interest in the details of the activities. While this direct form of communication may have been more effective in the short term, it also tended to promote an undesirable distinction between the Jordan Plan and the general school program.

From the Coordinator's point of view, these first few weeks were very successful. With only about three weeks of preparation, he had set in motion a varied program of activities that was keeping over 70 percent of the students actively engaged for part of every Wednesday.

The Viewpoint of the Principal

The Principal's precise relationship with, and responsibility towards, the Jordan Plan was never made clear. This omission was to be the cause of a considerable amount of confusion and difficulty during the year. In the event that a coordinator had not been employed for the Jordan Plan, much of the responsibility for planning and supervising the Plan would have fallen to the Principal and the Vice-Principal. Instead, the Principal found that he had very little to do with the day-to-day operations of the Jordan Plan. His relationship with the Plan tended to be more indirect--replying to complaints and comments from parents, monitoring the impact that the Plan was having on the regular activities of the school, and acting as something of an intermediary between the staff of the school and the Plan.

From his observations of the activities, and from his discussions with the Coordinator, the Principal received the early impression that the Wednesday courses were running well, and that the students were participating enthusiastically. Supervision was the only problem area he saw with respect to the students. When the idea for a four day instructional week had been mooted early in 1973, one of the selling points that had been used to convince the

teachers of the worth of the Plan had been the fact that very few students would be present at the school on Wednesday, thus eliminating any supervision problem. Now, in September, there were 400 students in or about the school on any Wednesday, without any formal supervision. This problem was accentuated by the inflexibility of the school bus schedule. Many students who were registered in only one course found they were forced to travel to and from school on Wednesday on the regular morning and afternoon bus. This meant that these students would be forced to wait idly about the school while their courses were not in session. Several incidents of vandalism in September and October caused the Principal some concern. An appeal to the honour and school pride of the students seemed to have some temporary effect, but the Principal anticipated that this would not be enough by itself to prevent subsequent outbreaks of vandalism. To make matters worse, from the viewpoint of the Principal, the teachers had been assured the previous year that they would not be asked to perform supervision duties on Wednesday. The Principal feared that the situation could get much more serious in the upcoming winter months when students would be forced to remain inside the school building on Wednesday.

Another problem that the Principal encountered was the question of lunchtime supervision during the regular school days. The teachers had also been assured that they would not be asked to supervise students during their thirty minute lunch break. It quickly became apparent that some form of supervision would be required, and the Principal asked the Students' Union to provide a team

of supervisors from among the grade 11 and 12 students. The senior students responded well to this challenge, and for about a month the supervision problem seemed to have been beaten. However, the senior students found it both difficult and invidious to impose their will on the junior students, and the group soon disbanded. This problem of lunchtime supervision was to continue throughout the year without any satisfactory solution. For a-while, the Principal and Vice-Principal took over the task by themselves. Then in November the Principal attempted to organize a group of volunteers from among the parents to come in to the school on a regular basis to supervise the students during the lunch break. This system worked till Christmas, and then, like the previous scheme, gradually fell apart. By February the Principal and Vice-Principal were doing all the lunchtime supervision themselves, each taking 15 minutes. This system continued till the end of the school year, the Principal being extremely reluctant to ask the teachers to assume this task.

During the first semester the Principal received a moderate amount of feedback concerning the Jordan Plan. Some of this feedback was direct and unsolicited opinion from parents, but he also made a point of asking parents for their opinions. During the first month several parents phoned him to commend the school on the Plan. In the main, they appeared to be impressed by the selection of courses available to the students, and pleased at the enthusiastic participation of their children. A few parents expressed some reservations about the voluntary nature of the Plan, and suggested that some minimal level of participation should be compulsory, especially for

the junior high school students. The Principal's answer to this suggestion was always direct and unaccommodating. In his opinion, one of the most important aspects of the schooling process was to develop individual initiative and responsibility on the part of the students. He believed that students were unable to learn to be responsible unless they were first presented with the opportunity to make a free choice. Perhaps the most important contribution of the four day week, in the Principal's opinion, was that it provided each student with a real choice as to how his Wednesday should be spent. The Principal was therefore unwilling to compromise this principle of voluntarism. And quite apart from this principle, he explained that the students had already fulfilled their formal requirements to attend school on the other four days, and that it was quite probable that it would be illegal to attempt to force students to participate in Wednesday activities.

Another criticism the Principal sometimes received from parents was that the cost of the Jordan Plan courses was too high. Many parents had several children attending the school, and some families found themselves spending a great deal of money to enable their children to take horseback riding, swimming, and other expensive courses. The Principal's reply to these criticisms was in line with his answer to the previous criticism: that this should be regarded by the student as an act of responsible choice. If the family financial situation did not allow for frequent expensive courses, the student should carefully plan how his limited resources should be best spent. In spite of these criticisms, the Principal's

general reaction was one of surprise that the parents had not responded more critically towards the Plan.

The Principal's observations of the teachers' reactions also suggested that they were adapting well to the new timetable. Wednesdays appeared to be very popular with the teachers. Staff meetings were easier to schedule, and full attendance could be guaranteed. These tended to take place about every two weeks, and generally took between an hour and an hour and a half. Within the first month of school, he had also had some indication that the altered schedule was of some assistance to the new system of subject area coordinators. Each subject area coordinator had used the time on Wednesday to assemble the teachers in his area to plan and organize more effectively. About eight teachers were assisting with Jordan Plan courses, while the remainder seemed to be fully occupied with their own individual lesson preparations, or other extra-curricular activities. On the whole the Principal was pleased at the way his staff had responded to the challenge of the Jordan Plan.

The Principal had received some negative feedback from the teachers concerning the Plan. Within the first two or three weeks some of the senior teachers began to complain about the lack of field trips. Whereas one of the prime objectives of the altered schedule had been to enable the scheduling of such trips on Wednesday, it quickly became obvious that such trips were now more difficult to schedule even than before. With such large numbers of students registered in the Wednesday courses it was almost impossible to schedule any occasional, large group activity on Wednesday. Even if such an

activity were to be scheduled, the teachers anticipated that few students would willingly forego their Jordan Plan courses for which they had paid. This difficulty was never discussed fully and openly by the Principal and staff together. While admitting the shortcoming of the Plan in this respect, the Principal tended to think that the recreational and cultural aspects of the Wednesday program might be sufficiently important to take priority over such things as field trips. He rationalized that the existence of the Jordan Plan might even justify a reduction in the number of field trips on the grounds that the students were now obtaining this wider experience through the Wednesday program.

The only teacher who openly indicated any serious dissatisfaction with the Plan was the music teacher. It was generally considered that in the 1972-73 school year the school had a music program that was better than average. This was all the work of the single music teacher who had been in the habit of devoting virtually every lunch break, and most afternoons after school, to his job. This effort had resulted in the creation of a number of different choral and instrumental groups, the publication of a record in 1973, and the creation of a reputation for music teaching that was widely known in the community. When he had first heard of the possibility of a four day school week, the music teacher had anticipated that this would seriously disrupt his music program. At the time he had made his protests heard, but the decision of the majority of teachers was to support a four day instructional week. During the first semester of the 1973-74 school year, the music teacher attempted

as well as he could to maintain the music program under a much shortened time allocation. Predictably, he found it almost impossible to conduct effective rehearsals in the time at his disposal, and he made sure that the Principal was aware of his dissatisfaction. But, apart from this single individual, the Principal was not aware of any other teacher who felt the same way about the Plan.

Throughout the year the School Board expressed considerable interest in the Jordan Plan. Board members considered that they had taken a risk in agreeing to the innovation, and they wanted to be kept fully informed as to its progress. When the original decision had been made to go ahead with the implementation of the Plan, the School Board had insisted that there be some form of independent evaluation of the scheme. In fact, no such evaluation took place until half way through the second semester when a team of officers from the local Regional Office conducted an investigation and made a report on the innovation. Up to that point there had been no comprehensive attempt to evaluate the Plan. There had however been numerous attempts to study the reaction of the various system members, and to gauge the acceptability of the innovation, both to the school and to the community.

The Viewpoint of the Students

In mid September 1973, the School Board requested the researcher to conduct a survey to determine the extent of student interest and participation in the Jordan Plan activities. They also wanted to discover how the students were spending their time on Wednesday during the regular school hours. The construction of

the questionnaire, the methods of analysis, and the interpretation of the data reflected this twofold purpose. The questionnaire was designed to yield information that might be helpful to the Superintendent and the Board in assisting them to come to a decision concerning the future of the Jordan Plan. The questionnaire was administered to the students on September 27, 1973.

Data from the 634 questionnaire forms were punched onto IBM cards and processed by the University of Alberta Computing Services, using program DERS:NON P 10. A simple statement of the frequency and percentages for each variable was obtained. Using a subroutine of the same program, bivariate frequency distributions were obtained for 19 pairs of variables. The variables representing sex and grade level were plotted against all other variables respectively, excluding the five variables representing the actual activities in which each student was registered.

Owing to the fact that the whole population of the school was tested, and that no inferences were being drawn to any other population, no use was made of the chi square significance values produced by the DERS:NON P 10 program. Such values have no meaning in population statistics of this kind. All differences found among and between variables are real differences. Likewise, the questionnaire was a non-repeatable instrument designed to discover a student's behavior and attitude on a particular day. Therefore measures of replicability were also inappropriate.

From an analysis of the data, a two page report was prepared by the researcher and submitted to the Superintendent for presentation

to the School Board. Since the purpose of this survey was to assist the Superintendent and the Board in their evaluation of the Plan, only information considered helpful to this purpose was related. An attempt was made to keep the report brief and simple. No effort was made to speculate on any causal relationships among the variables. The frequencies and percentages for each variable were presented in strictly quantitative form, and a number of apparent trends indicated by the bivariate analysis were highlighted (Appendix I).

Two qualifications should be attached to these "trends." Firstly, any decision as to the relationship between any two variables must be an arbitrary one. It might have been possible to arrive at some kind of arbitrarily selected "critical level" for each relationship, above which a score might be considered important or "significant." However, whatever small gains might have been made in the direction of methodological rigour by this procedure, would probably have been lost in the direction of comprehensibility. Bearing in mind the very simple objective of the questionnaire, it was decided that the level of importance of each variable could best be determined by the researcher and the School Board together. The second qualification that should be made is that the word "significant" was being used in its popular sense. That is, it does not refer to the likelihood of a finding occurring by chance, but rather to the relative size and direction of a relationship.

The researcher deliberately refrained from applying any normative value or interpretation to the data. It was considered to be more useful to observe the reaction and interpretation of

the School Board than to present the administration with a complete interpretation of the data. The report was presented to the Superintendent and the Board, and they were invited to draw their own conclusions. Some discussion and explanation accompanied the report to ensure that its contents had been understood. There were also some questions and discussions directed to some of the relationships among variables that had not been discussed in the report.

The Superintendent's initial reaction was one of satisfaction. He considered that 77 percent, representing the proportion of students registered in one or more activities, was very high, and considered this to be an excellent indication of the progress of the Jordan Plan. He was similarly pleased to learn that 93.5 percent of the students expressed preference for the Jordan Plan over the old five day school week. He noted the tendency for a higher proportion of junior high students to take more than one activity, but expressed no surprise.

The reactions of the Board were somewhat mixed. All members seemed pleased that so many students were registered in Wednesday courses. However, two or three members of the Board expressed some consternation about the remaining 22.6 percent who indicated they were not registered in any courses. There was no consensus as to what would be an acceptable level of registration. Similarly, two members of the Board questioned the high number of students who indicated preference for the Jordan Plan over the five day week. They speculated that the likely cause of this high response was the opportunity to have one day without formal schooling, rather than any

serious indication of the educational merit of the Wednesday program.

Some Board members also expressed interest in the amount of time students were spending on school work. Item #7 of the printed analysis (Appendix I) reported the hours each student spent in study directly related to school assignments. They were interested, but not suprised, to learn that less than half the students (48.3 percent) reported doing any school related work on Wednesday. A further analysis of the data indicated that there was not a great deal of difference in the number of hours that students from different grade levels were spending in private study.

This kind of discussion continued for some time. Board members would ask for the precise statistical relationship between a pair of variables, and then, when the information was supplied, they would find it difficult to evaluate. One point of general agreement seemed to emerge from this meeting. As long as a large proportion of the students expressed satisfaction with the scheme, then it must be doing some good. Some members retained serious misgivings about various aspects of the Plan, but they were won over by the obvious popularity of the innovation.

This was the first indication the researcher received that evaluation of the innovation by objectives might be an impossible task. Clearly, Board members did not have a common set of objectives for the Jordan Plan. Some members were extremely enthusiastic about the potential of the Plan as an agency of "community education." These members tended to focus on the Wednesday activities as the all-important component of the Plan. Others had seen the Plan as the

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opportunity to make more efficient use of the time during the teaching week. Some of the members wondered how the Wednesday activities fitted in with this objective. In the absence of any unanimity over the prime objective or objectives of the Plan, Board members seemed to slip towards a kind of pseudo-objective for the Plan--political viability. As long as the Board sensed that the public and the system members supported the Plan, then it was prepared to continue its support for it. But as soon as this support began to weaken, the Board agreed that the continuation of the Plan should be reviewed.

This questionnaire was only one of the ways in which the researcher attempted to discover the reaction of the students to the innovation. Using the less structured data gathering techniques discussed in a previous section, the researcher was able to apply a form of verification test to the results of the questionnaire.

The researcher came into contact with students, both individually and in small groups, every Wednesday during the first semester. Talking with students in the corridors, during their courses, and at the local lunch spot, the researcher was able to get a reasonable indication of student feeling. For the most part, students seemed willing to express their opinions frankly. Judging by some of the remarks they passed, they did not appear to be intimidated by the presence of the researcher, nor did they seem to associate the researcher too closely with the staff of the school or with the Jordan Plan.

During the first semester the predominant reaction to the Jordan Plan seemed to be one of enthusiasm. The students were aware

that the Jordan Plan was an experiment whose success depended on their support and participation. They were also aware of a strong level of parental support for the Plan, and this seemed to strengthen their opinion.

Students were invited to record any comments they might have on how the Jordan Plan was operating on the reverse side of their questionnaire form (Appendix A). About a third of the respondents recorded comments. Well over half of these comments indicated a high level of satisfaction with the Jordan Plan to that date. These comments covered the whole range of enthusiasm. One grade eight girl wrote, "I think that the Jordan Plan is the greatest idea ever. And I think that the people who thought of it is smart. And I think we should have the Jordan Plan four days a week instead of one." Other students were more specific about the benefits of the Plan. Some students reported that they now had more time for their homework. A number appreciated the break from the pressure of school work. While many expressed considerable interest and pleasure in the Jordan Plan activities, others indicated they were deriving just as much benefit from activities not directly associated with these Jordan Plan activities. Some reported that they were able to take part-time employment on Wednesday, and others mentioned activities like shopping, fishing, playing ball, watching television and sleeping. Most of the comments could be summarized by the comment of a grade ten girl: "I think the Jordan Plan is a worthwhile project. It gives you time to do the things you like."

There were very few comments that might have indicated total

opposition to the Plan. Twenty students complained about the fee structure for the Wednesday courses. The following statement from a grade 12 girl seemed to sum up this reaction: "They shouldn't have to charge nine lousy dollars for yoga. If the Wednesday courses cost less, I'd join more. It would be good to take a whole day of these courses if you were a millionaire." Another 16 students suggested new activities that they would be interested in taking, or which had been promised but never developed beyond the planning stage. Fifteen students complained about various aspects of the scheduling of Wednesday courses. During the first round of Jordan Plan activities, many students were taking three and even four courses at once, and there were some problems with overlap. Twenty students complained about the compressed school days; a few claimed that the longer day was more tiring, but most simply wanted a longer lunch break. Just a handful of students complained about the difficulty of getting to and from school on Wednesday, about the uncooperative behavior of some of the students, and about the amount of homework they were being asked to do on Wednesday. The remaining comments tended to be isolated complaints about various aspects of the way the Wednesday courses had been organized.

The overwhelmingly positive comments seemed to substantiate the very high proportion of students who indicated their preference for the new four day school week.

The Viewpoint of the Teachers

During the first two months of the school year, the Principal had heard very little criticism from the teachers concerning the

Jordan Plan. A Meet the Teacher evening was scheduled for October 25, and he wanted to have some definite information about the reaction of the staff to present to the meeting. In an effort to elicit this information, he prepared and administered a questionnaire during a staff meeting on October 24 (Appendix D). All the teachers who had been on the staff during the previous year were invited to complete the questionnaire, and all returns were anonymous. The results were calculated as raw scores and percentages (Appendix D).

Several features of this questionnaire should be noted. The scope of the questionnaire was limited to determining the ways in which the altered schedule had affected the performance of the teaching role. That is, questions were related to aspects such as student fatigue, teacher work load, planning, organization, teaching and extra-curricular activity. Only one question, Question #11, required the teachers to express any sort of preference for the altered schedule. It should also be noted that the teachers were asked only to express a preference between the altered schedule and the former schedule; at no time were they asked to comment on the Wednesday activity program.

The questionnaire was prepared under pressure. Some of the items were redundant, and there were several typographical and grammatical errors. Several teachers expressed some difficulty in distinguishing between several pairs of questions in their intent. More seriously, several questions provided a range of answers which did not constitute a logical continuum. However, in spite of these shortcomings, the results probably had some validity. The objectives

of the questionnaire were relatively simple and straightforward, and most teachers indicated that they had understood what was required of them. The validity of the results was certainly never questioned by anyone in the system, and for this reason, if for this reason alone, they were considered in this study.

The results indicated that the majority of teachers could detect no appreciable change in the students' ability to work, or the standard of academic work achieved. Most teachers considered that they were able to plan and coordinate their work rather better than in previous years, without any tremendous increase in their work load. The majority expressed a preference for the longer periods, and few teachers found that the longer school days were significantly more tiring. The staff was divided over the question of whether the altered schedule had affected their participation in extra-curricular activities, and most did not feel that they were able to give their students any more private tutoring than they had before. In conclusion, a majority expressed a preference for the compressed teaching schedule over the old five day teaching week.

The response of the Superintendent, the Principal and the School Board to these results was the same kind of response they had given to the student questionnaire of a month earlier. They considered that, since the teachers' responses to all questions had been either predominantly positive or neutral, then the teachers as a group could be said to be in support of the Jordan Plan. Therefore, no drastic alterations in the Plan were called for. No attempts were made to determine the identity of the teachers who had responded

negatively to various items, and no attempt was made to discover why they had responded in this way. The results of the survey were read back to the staff with no discussion at all.

While the data from the field research had seemed to verify the data from the student questionnaire, continued contact with the staff of the school began to raise some doubts about the results, and the interpretation, of the teacher questionnaire.

The results of the teacher questionnaire seemed to suggest that there was almost complete agreement among the staff on the subject of the Jordan Plan. Teachers had been asked straightforward questions to which they had been forced to give straightforward answers. Did they think that the students were doing as well academically as they had done the year before? Yes, they did. Did the altered schedule allow more time for planning and coordination? Yes, it did. The questionnaire allowed no space for discussion, for teachers to register their qualifications or their ambivalence.

In fact, contact with the teachers on an individual basis, seemed to indicate that most teachers were somewhat ambivalent about the Jordan Plan. A week after the questionnaire had been administered to the staff, one of the teachers made a somewhat cryptic remark to the researcher about the results of the survey. According to this teacher, many of the staff were not as happy with the Jordan Plan as the results of the survey seemed to indicate. There were several features of the Plan that concerned many of the staff, but, up until that time, none of the staff had been prepared to voice their criticisms and concerns openly. The informant suggested that the

reason for this reticence was a mixture of loyalty to the administration, and timidity. The Superintendent and the Principal had placed their weight solidly behind the Plan, and many teachers believed that open criticism would not be received very kindly. A number of teachers reported that, at the beginning of the year, the Superintendent had made an appeal for the full support of the staff for the Plan, and had even indicated that teachers who could not support the Plan might be better off teaching in another school. From the point of view of loyalty, teachers were reluctant to be the first to criticize the Plan openly.

The extent of this negative feeling was impossible to gauge accurately during this initial period of exploration. However, a number of concerns did start to emerge from discussions with teachers.

Not all teachers were happy with the altered schedule. Many teachers reported that the altered schedule was not working out at all well for them. They complained of the extra work load, the strain on themselves and on the students of the compressed work day, and the shortened lunch and morning breaks. They claimed that class discipline had worsened, and tended to attribute it to the altered schedule. A smaller number were not even very happy with the free Wednesday, complaining that staff meetings, and subject coordination meetings were eating into their planning time, and suggesting that there could be subtle pressure on the teachers from the administration to become involved in some aspect of the Wednesday activity program.

Some teachers were concerned about the Wednesday program itself, doubtful about some of the courses offered, concerned at

the cost of many of the courses, and resentful at the way the Wednesday program had cut into their regular extra-curricular activities. Others complained of the supervision duties that they were being asked to do in spite of earlier assurances from the administration that they would have none. A widespread but very muted concern involved the relationship of the staff with the Jordan Plan and the administration of the Plan. Most of the teachers who had been at the school during the previous year were aware that the original idea for the plan had come from among their own ranks. They had expected that the staff would continue to have some control over its operation and development. In fact, they observed that the Plan seemed to be controlled by the newly appointed Coordinator, who seemed to operate largely independently of the staff or the Principal's direction. A few of the senior teachers were uncertain about the relative status of the new Coordinator, and somewhat let down that their advice was not being sought more actively.

The concern that was expressed most clearly was that the Jordan Plan was somehow very different from what many of the teachers had envisaged when they had agreed to the innovation during the previous year. A comment repeatedly made to the researcher was that the Plan had been intended as something to help the teachers, but had somehow turned around to be primarily for the benefit of the students. This factor may have been the major reason why teachers felt ambivalent towards the Plan. They observed that the students seemed to be enjoying, and even profiting from, the altered schedule and the Wednesday activities. They could see that the School Board

and the community were enthusiastic about what was being offered to the students. As dedicated teachers, they felt morally obliged to support the Plan on the basis of these obvious advantages. But at the same time, many teachers were not happy about some aspects of the Jordan Plan as they affected teachers. They were confused about what the Plan was trying to do, and what their obligations were towards the Plan. They were bewildered and somewhat resentful at the direction the Plan had taken.

The Viewpoint of the Jordan Plan Instructors

A brief questionnaire was prepared by the researcher in response to a request from the Coordinator of the Wednesday activity program. The Coordinator wanted some quick indication of how the instructors were coping with their courses, and the approximate numbers of students attending each Wednesday. Owing to the wide variety of courses being offered, the questionnaire was left largely unstructured. Instructors were asked to indicate a number of strictly quantitative responses, and then they were asked to write down their impressions of the first three weeks, to describe any problems that were developing, and to comment upon the adequacy of the facilities. The distribution and collection of the questionnaire forms was left in the hands of the Coordinator (Appendix B).

Only 15 from a possible total of 29 questionnaire forms were returned to the Coordinator. This rate of return was below most criteria of statistical adequacy, but, as far as the Coordinator was concerned, the survey served its purpose. He was able to determine

that most of the courses were running smoothly, that the instructors seemed enthusiastic, and that student attendance was high. Most of the comments received (Appendix B) indicated a high level of focus on the specific activities, while a few expressed support for the concept of the Jordan Plan.

This questionnaire was probably superfluous, in that the Coordinator had maintained a high level of communication with each instructor from the beginning. He was in the habit of visiting most classes once a week, and he was already aware of most of the minor problems that were developing. As far as the researcher was concerned the major benefit derived from the survey was to reinforce the opinions formed by less structured observation of the instructors. Most of the instructors were recruited from the township. They came in to the school each Wednesday for the one or two hours of their course, then left immediately afterwards, with little or no fraternization with the regular staff. It was very rare to see any of the instructors in the staff room, except for the few teachers who also conducted Wednesday classes. The Coordinator was the only adult with whom they had any regular contact while in the school. This did not seem to bother the instructors at all, but it did prevent more of the regular staff from becoming more involved and informed about the activity program.

The Viewpoint of the Parents

September and October had been critical months for the Jordan Plan. The school had made the initial adjustment to the four day week, an extensive program of Wednesday activities had been started,

and the administration had made a first attempt to assess the impact that these changes were having on groups both inside and outside the system. The next few months were a period of pattern establishment and consolidation for the system.

During October, most of the first round of activities came to an end and students were able to register for the second round. Summer activities like flag football and canoeing gave way to snowshoeing and skiing. The total number of students registered for courses started to drop somewhat, but this did not alarm the Coordinator or the administration. The drop was attributed to the fact that fewer students were taking more than one course, and that many of the senior high school students were actively engaged in other forms of useful activity on Wednesday.

By the end of October, the Jordan Plan was beginning to attract attention from the media. An item on the Canadian Broadcasting Corporation's television news sparked a lot of interest throughout the city, and several other television and radio items, as well as a number of newspaper articles, maintained a high level of visibility for the Plan throughout the year. As a result of this media coverage, the Superintendent and Principal were asked to speak at a number of neighboring school systems. They were able to reinforce their descriptions of the Plan with data from the various surveys that had been conducted already.

From the viewpoint of the Superintendent and the Board, the Plan was already a considerable success. It had apparently been accepted by all significant groups in the school system and in the

community; it provided the students with a range of extra-curricular activities not previously possible; it provided the school and the system with an unprecedented amount of publicity; and it cost the Board virtually nothing to operate.

However, the School Board wanted to ensure that the Plan was fully acceptable to the parent community. The first attempt to gauge this opinion was at a Meet the Teacher Evening on October 25. The results of the surveys of student and teacher opinion were read to the parents, and several members of the administration spoke about the progress of the Plan. The parents were not given the opportunity to raise questions or concerns in the open meeting, but over coffee afterwards they were able to meet the teachers and the administrators on an individual basis. The Superintendent, Principal and Jordan Plan Coordinator subsequently expressed their satisfaction with the type of reaction they had received from the parents. For the most part, parents they had spoken to had been in favor of the Plan, and were in favor of continuing the experiment, at least until the end of the year.

The experience of the researcher was somewhat similar. Most of the parents approached at this, and subsequent, evenings expressed themselves in favor of the Jordan Plan. Most exhibited a liberal attitude towards their children, and towards education generally. If they could be assured that the academic standards were being maintained over the four days of instruction, most parents seemed to take the attitude that anything their children did on Wednesday was an extra.

In spite of this generally positive reaction, many parents voiced criticisms and misgivings about the Plan. Most parents volunteered that their children did appear to be more tired at the end of the extended instructional day than they had the previous year. They spoke of sleepiness after school, and an inability to do homework. These same parents who mentioned their children's fatigue tended to express concern for the teachers. If their children were becoming tired, how were the teachers coping with the extra work? Another widespread criticism was the high cost of many of the Wednesday courses. Some parents suggested that the cost structure of the courses could be a socially divisive element.

The administration realized that such evenings tended to attract only the more interested and involved parents and there could be a large group of critical parents who stayed away. Nevertheless, they were pleased, and somewhat surprised, by the parents' reactions. They had expected that a sizeable minority of parents would be opposed to the Plan on the grounds that it represented a "progressive" move away from traditional patterns of education, or that the Plan was simply a device to provide teachers with an extra holiday. In fact, reaction from parents during the first half of the year was always rational and relatively moderate.

The reaction from the parents at this meeting had been encouraging. However, the Board wanted to obtain a more definite indication of parental opinion concerning the Plan. A public meeting was called for the evening of November 21. The Jordan Plan was to be the sole topic of discussion. The 60 parents who attended the

meeting were shown a slide presentation depicting the development of the Plan, and heard several of the administration describing its merits. Questions from the audience were few in number, and focused mainly on the high cost of some of the courses. A committee of parents was then elected to assess general parental reaction to the Plan and report back to the Board.

During the following month the committee administered a telephone survey of a sample of 140 households (Appendix F). A description of this process was included in Chapter 3. The results of this survey were quite predictable from parental reaction which had already filtered through to the system (Appendix F). Almost all the parents indicated some knowledge of the Jordan Plan. Nearly two-thirds of the sample (65.7 percent) believed the program was worthwhile and should be continued for another year, while only 14.3 percent believed the Plan should be discontinued. This was the reaction that the Board and the administration had expected and hoped for. But in spite of the predominately positive response, almost half of the parents mentioned some weakness or flaw in the program. High on this list was the question of expense. Many parents claimed that they were paying 40 and 50 dollars so that their children could attend Wednesday courses. Other parents blamed the school because their children were not involved in any of the Wednesday activities. A few complained about the poor selection of activities, the time-tabling of classes, the difficulty of providing transport for their children on Wednesday, and a number of other procedural difficulties.

The survey also uncovered a number of parents who were opposed

to the innovation on the grounds that it represented a departure from their conception of true education. Such parents expressed the opinion that the school was being too lax with the students, and that Wednesday would be better spent in regular, disciplined, school activities. In view of the vehemence of some of these replies, it was surprising that so few of these parents expressed their opinions directly to the Superintendent, the Principal or the Board. Most of the criticisms were of a minor nature, however, and the majority of parents seemed willing to make allowances for experimental adjustments during the first year of operation. On the basis of these results, the School Board felt justified in concluding that the community reaction to the Plan was basically positive.

Focusing Concern

At the conclusion of the phase of exploration it became necessary to delimit the scope of the study. Up to this point the researcher had been studying the entire school system with no particular emphasis on any of its member groups. From a practical point of view it now became necessary to reduce the focus of concern, to enable a more detailed study of part of the system.

The overriding purpose of the study was to learn more about the change process in educational institutions. The first stage of exploration was designed to identify an area within the study most likely to produce new insights into the change process. On the basis of the data already gathered, several areas of the research could now be de-emphasized as being non-problematic. That is, it was considered that further and more intensive study of certain areas

would be unlikely to add any new understanding of the change process.

Further intensive investigation of parental attitudes was abandoned for a number of reasons. The reaction of the community during the first semester had not been particularly dynamic, and would have provided little to study. The telephone survey had indicated a wide level of support for the Plan. Certain parents had expressed opposition to the Plan, but it seemed unlikely that they would actively attempt to change the course of events during the following few months. The parent community was also considered to be tangential to the process of change. Except in a small way, the parent community was not being directly affected by the innovation. Unlike the teachers and the students, the parent community was not being forced to change their work or living habits in any drastic fashion. For this reason, their opinions and actions could be expected to be of less direct impact on the development of the Plan.

The possibility of focusing on the student population was abandoned for similar reasons. All the data suggested that the students' reaction towards the innovation had been overwhelmingly positive. There seemed little point in pursuing the obvious still further.

The staff of the school offered a much more dynamic area for study. According to the study conducted by the Principal, the teachers were just as much in favor of the Plan as were the parents and students. However, the researcher's own observations suggested that this support was neither as unanimous nor as unreserved as the results of the questionnaire had indicated.

The confusion, the resentfulness, and the ambivalence of many of the teachers towards the Jordan Plan were touched on earlier. Teachers were continuing to give their tacit support for the Plan, while many of them retained serious doubts and misgivings about the way the Plan was being developed. At first it appeared strange that a group of articulate professionals would allow a project with which they had so many reservations to proceed without the most searching discussion and analysis. The answer to this question seemed to be the same for each dissenting teacher. When the idea for the Plan had originally been raised, this kind of discussion had taken place. A set of objectives had been determined for the innovation, and the advantages and disadvantages explored. On the basis of this analysis, the great majority of teachers had voted in favor of proceeding with the Plan. The problem confronting many teachers at this later date was that the Jordan Plan had not evolved in the way they had imagined. They had understood that one set of objectives would be paramount, yet they observed another set of objectives being followed. They had expected the altered schedule to promote certain types of activities, yet they observed a different pattern of activity emerging.

The roots of this confusion and ambivalence seemed to lie in the goals and objectives that the teachers perceived for the Plan. No two teachers seemed to have an identical perception of the objectives of the Plan, and many of the objectives mentioned seemed confused, and even contradictory. Furthermore, there appeared to be a significant group of teachers who believed that there had been a

substantial shift in the objectives of the Jordan Plan over the previous year.

Buckley's point concerning the problematic nature of social consensus seemed to be borne out among the staff. Conventional consensus theory tends to start from the assumption that the norms and values of a society or social unit are held in common by all but the "deviant" members of the group. The behavior of such systems can be predicted from a precise knowledge of these common values and norms. Buckley, on the other hand, suggests that "the degree of commonness and specificity of norms and values in a society is empirically problematic" (Buckley, 1967:159).

Symbolic interactionism suggests that human beings act towards things on the basis of the meanings that these objects have for them; that these meanings are derived from the social interaction that one has with one's fellows; and that these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters (Blumer, 1969: 2).

The data already collected indicated that a useful focus for the second phase of inspection might be a study of the link between meaning and action in the context of the staff's reaction to the Jordan Plan. More specifically, it was decided to explore the link between the goals and objectives perceived for the Plan by each teacher, and the teachers' perception of the way the Plan was actually developing.

Summary

Chapters 3 and 4 presented a review of the exploration phase of the study. Chapter 3 focused on a description of the setting of the innovation, and an account of the development of the concept of a four day week prior to September 1973. Chapter 4 presented a review of the exploration phase of research during the first half of the 1973-74 school year.

Using a variety of structured and unstructured techniques, the researcher studied the attitudes and involvement of all major individuals and groups affected by the Jordan Plan. These included the Principal of the school, the Coordinator of the Jordan Plan, the instructors of the Jordan Plan courses, the teachers, the students and the parents. At a broader level, the attitudes and actions of the Superintendent and the School Board were also observed.

Towards the end of the chapter it was possible to delimit the scope of the study and indicate the focus for the phase of inspection to follow.

CHAPTER 5

THE PHASE OF INSPECTION

The preceding phase of exploration had established the focus for the phase of inspection. It was to be an examination of the perceptions and behavior of one group within the system--the teaching staff of Jordan High School. More particularly it was to be a study of the interrelationship of, and the interaction between, the teachers and the Jordan Plan. Preliminary investigation at the stage of exploration had suggested that the apparent unanimity of the staff with regard to the Jordan Plan was probably both superficial and illusory. Teachers had displayed a wide range of perceptions about the Jordan Plan, particularly concerning the goals and objectives which the Plan was designed to fulfill. These varying perceptions seemed to affect the attitudes and behavior of the teachers towards the Plan. Furthermore, there seemed to be considerable overlap between their attitudes and behavior towards the Plan, and their attitudes and behavior towards other aspects of the school and the school program.

Methodology

Considerable attention was given to the choice of data gathering techniques for this phase of inspection. The techniques used at the earlier stage were no longer fully appropriate. While the unstructured interviews and observation sessions had been invaluable in helping to identify the problematic elements of the system, it was considered

that these techniques lacked the rigor and the focus necessary for this second phase of research. What was needed was an instrument which would provide detailed information of a specific nature about the perceptions and activities of each teacher. A questionnaire form might have provided some of the information required. However, this alternative was rejected on the grounds that it would have imposed an undesirable degree of "closure" on the research process. The phase of inspection is not synonymous with the stage of data gathering in a conventional empirical study. At the beginning of the phase of inspection, the researcher was still not ready to frame a problem statement in terms of empirically testable hypotheses. A general area of interest had been identified, and certain key relationships specified, but no hypotheses had been forthcoming. The purpose of this next stage was, in fact, to generate testable hypotheses. In view of this, it was considered that a structured, written questionnaire would have been inappropriate.

An interview schedule seemed to offer many of the advantages of both the unstructured interview and the questionnaire. An interview schedule would have sufficient structure to elicit a comparable set of responses from each teacher, and yet be free enough to allow the discussion to follow lines of individual interest.

The schedule was constructed on the basis of the areas of interest identified during the exploration phase (Appendix J). The schedule was broken into five parts, each part following a different theme.

Part I was a series of questions designed to discover certain

basic demographic information about each teacher. When the schedule was constructed, it was not known which, if any, of this demographic information would achieve any significance in the interpretation of the results.

Part II asked the teachers to reconstruct the implementation of the Jordan Plan. Questions in this part tended to focus on the teachers' perceptions of the original objectives of the Jordan Plan, and their perceptions of the forces affecting the evolution of the Plan.

Part III attempted to discover the teachers' perceptions about the behavioral modifications brought about by the four day instructional week. It consisted of four sections, each section concentrating on a different aspect of school life--the behavior and attitudes of the students, the task environment of the teachers, interpersonal relationships among the staff, and the teachers' involvement in recreational and other extra-curricular activities.

Part IV was a very general set of questions designed to prompt a broader discussion of the school. Asking the teachers to evaluate the school, and the school program, on the broadest possible basis, the researcher hoped to promote a more general and free-ranging discussion of the teachers' orientation towards the school and the Jordan Plan.

Part V returned to the subject of the Jordan Plan, and asked a number of questions concerning the teachers' overall evaluation of the Jordan Plan, and the reaction of other elements in the system to the Plan.

This schedule took several weeks to prepare. A draft copy of the schedule was presented to faculty and graduate students in educational administration at the University of Alberta for their comments on form, style and clarity. Their comments were incorporated in a second draft. The possibility of validating the schedule with some form of pilot test was considered but rejected. Such a test would have had to be administered to the teachers themselves, since the information sought pertained only to the Jordan Plan, and since the whole population of teachers was being tested. Furthermore, since the data sought would be of a qualitative rather than a quantitative nature, it would not be possible to test the "validity" or "reliability" of the pretest results in any precise way. All that could be gained from such an exercise would be some indication that the teachers believed the schedule to be sufficiently comprehensive. Such a small gain was not considered to be sufficient to compensate for the extra time and inconvenience that such a procedure would cause the subjects of the pretest.

Instead, it was decided to begin interviewing teachers, making adjustments to the interview schedule during the first few weeks on the basis of the teachers' responses. If necessary, these first few teachers could be re-interviewed with the final form of the schedule.

Administering the Interview Schedule

The interviewing began on February 6, 1974, and concluded with the last teacher on June 5, 1974. This four month span of time was

probably longer than desirable, but the constraints of the school timetable seemed to preclude the possibility of completing the task in any shorter time. Wednesday proved to be the only time that most teachers were free and willing to spend the one to two hours necessary for the interview. In fact, most Wednesdays there was time for only two interviews. On the other four days of the week, teachers were not available except during the 30 minute lunch break and after school. The lunch break was too short to conduct an effective interview, and it was decided that most teachers would be too tired to participate in a lengthy interview after an extended day of teaching. The only teachers who were interviewed during regular school hours were the Vice-Principal and one of the subject coordinators, both of whom had a certain amount of non-class time each day.

It could be argued that the normal development of events during the three month interviewing period might call some of the results into question. This point is probably valid. Considerable attention was devoted, by means of questions and general observation, to keeping track of the developing factors that might affect the responses of teachers. A few factors of this kind were observed, and an attempt was made to modify the interpretation of the results accordingly.

Interviews were generally set up a week or two in advance. Interview times were set up on the basis of the immediate availability of a particular teacher, rather than according to any systematic roster. However, an attempt was made to interview the teachers randomly, rather than to interview one type or category of teacher

before proceeding to the next.

Interviews were all recorded on a portable cassette tape recorder. Considerable attention was given to selecting the best method of recording the interviews. Some of the action theorists caution against the use of tape recorders on the grounds that they tend to inhibit a free flow of information (Gordon, 1969). Others suggest that the use of mechanical recorders tends to result in the gathering of excessive amounts of data, which must be culled extensively before any use can be made of it. However, it was considered that the researcher had established sufficiently good relations with the staff of the school to overcome any hesitancy teachers might have had to allowing their opinions being recorded. This proved to be the case, and the number of indiscrete and unrepeatable comments of a personal nature that were recorded seemed to indicate no lack of candour on the part of the teachers. Transcribing the taped interviews was a lengthy process. However, it was decided that it was necessary to have each teacher's response in full. In taking notes of a conversation there is always a tendency for the recorder to be somewhat selective. This tendency is altogether avoided by the use of a tape recorder and full transcription. The researcher's personal experience (Prebble, 1970) had also convinced him of the value of a tape recorder in this type of research situation.

The first four interviews identified a few small changes that needed to be made to the interview schedule. However, these modifications were not considered sufficiently serious to warrant re-interviewing these teachers. Most teachers expressed surprise at the

comprehensive nature of the interview. Many teachers started the interview by disclaiming any detailed knowledge of the Jordan Plan, but, as the interviews unfolded, most teachers manifested quite strong feelings about various aspects of the scheme.

One section of the schedule which took on more importance than was originally intended was Section IV concerning the teachers' general impressions of the school. Teachers reacted in very different ways to this section. For most teachers the questions in this section offered no difficulty; they expressed themselves frankly and openly about the school both positively and negatively. Others found it a little harder to be quite so frank, but, with some encouragement, were prepared to utter their opinions. Only one teacher actually balked at some of the questions, and one or two of the other teachers gave the impression of telling the researcher what they thought he might want to be told, rather than what they actually thought. As the interviewing proceeded, it was found that by moving Section IV nearer to the beginning of the schedule, some teachers could be encouraged to be more frank in their response to subsequent questions. That is, if a teacher had once committed himself to a negative statement about the school as a whole, he seemed much more willing to express himself critically about the Plan itself. It remained up to the judgment of the researcher whether this section would come earlier or later in any particular interview. For some teachers the converse was true; these teachers needed a long period of specific questions related to the Jordan Plan before they were prepared to express an opinion about the quality of the school operation as a whole.

At the beginning of the interviews subjects were reminded of the confidential nature of the research. Their statements would not be relayed to any person in the system during the course of the research, and subsequently, when the results were put in written form, their identities would not be revealed. By the time the interviewing commenced the teachers at Jordan High School seemed completely assured about this matter of confidentiality.

Most of the questions in the schedule elicited responses of a predominantly qualitative rather than quantitative nature. That is, respondents were invited to answer the questions in their own words, rather than being forced to fit their responses into some prearranged quantifiable scale. For purposes of analysis and description some minimal categorization was imposed on the responses after the interviews had been conducted. The dangers of biased interpretation implied by this approach are obvious. However, these dangers were minimized by two precautionary procedures. Response categories were left at their broadest level possible to avoid the possibility of misinterpreting the responses of teachers when making choices as to categories. Generally, only three response categories would be used--positive, neutral and negative. Such a broad level of categorization avoided almost all possibility of misinterpretation and ambiguity. The other procedure was to avoid using any statistical procedure more complex than simple tabulation of frequencies.

RESULTS

Part I of the interview schedule was designed to obtain certain demographic information about the teachers at Jordan High School. Only substantive data is reported in this chapter, although the demographic data from this part is incorporated in the analysis of findings in Chapter 6.

Introduction of the Jordan Plan (Part II)

Shannon's account of the sequence of events that led up to the introduction of the Jordan Plan was verified by many of the teachers and administrators who were in a position to know the facts. Teachers who had been at the school for a year or two previously, and who took an active interest in school affairs, tended to confirm the outlines of his account. Hewit confirmed that the idea had originally come from Shannon, and that he had placed something of his own interpretation on the Plan as it had developed. The Principal and Superintendent acknowledged that the idea had come from Shannon and Hewit, and at no time deliberately attempted to gain personal credit for creating the Plan.

However, there were many teachers who had quite a different perception of how the Plan had developed. All the teachers who started at the school in September 1973, had the impression that the Plan was the creation of the Superintendent or the Principal. For most of these teachers, their first contact with the Plan was a briefing about the altered schedule given by the Superintendent at the beginning of the school year. With no reason to question what

they were being told, these teachers accepted unquestioningly the Superintendent's account of what the Jordan Plan was all about.

The most revealing data arising out of this section came in response to the questions concerning the perceived goals and objectives of the Plan. Teachers were asked what they thought the goals and objectives of the Jordan Plan were. In the case of teachers who had been at the school during the preceding school year, they were asked to give their perception of what they understood the objectives to be at the time the teachers decided to support the Plan. Teachers who joined the staff subsequently were asked to give their impression of the objectives of the Plan as they had been explained or demonstrated to them.

Each teacher was asked to recall the objectives of the four day week as they were first explained to him. Most teachers could remember more than one of these original objectives, in which case they were asked to indicate which objective had been given most importance. Their answers, when edited and compressed, fell into ten categories.

1. To provide a more even balance between academic education and cultural, sporting and recreational experiences.

Eight teachers gave this as being the most important objective of the Plan, while another five mentioned it as being a secondary objective. According to one teacher the major objective of the Plan was,

. . . to make school a little more of a human experience. We bottle the kids up in school for five days a week and it becomes very rigid. Kids get less and less say in what they are actually doing. The objective of the Plan was to introduce

a new element into the program so kids can get the opportunity to search for different experiences than they normally get in school (Recorded Interview).

Other teachers saw it as, "a chance to provide another means of education for the student other than in the classroom"; an opportunity ". . . to get the kids interested in different activities than those presented in the normal academic program, and to introduce them to things and activities which are not available in the school." These teachers were referring to the Wednesday program and the opportunity for students to participate in a range of non-academic activities.

2. To enable the teachers to make more effective use of their time under a compressed teaching week.

Eleven of the staff cited this as the major objective of the Plan, while another nine mentioned it as a secondary objective. This objective placed the primary emphasis on the contribution of the four day week to the teacher himself. These 11 teachers believed that the compressed teaching week had been introduced primarily for the benefit of the teachers. As Shannon claimed, the four day week ". . . would be an easier teaching week. . . . it was basically to make the instructional week easier for teachers."

Within this objective, teachers anticipated a variety of advantages:

--Wednesday would be a good day for scheduling field trips, and other educational experiences of an irregular nature. This would reduce the disruption caused to regular school days.

--Parent teacher interviews could be scheduled for Wednesday,

allowing teachers more time to speak with parents and also reducing the disruption to regular classes.

--Students could be required to schedule all professional appointments for Wednesday reducing the number of students absenting themselves on regular school days.

--Wednesday would be a day of preparation when the school would be almost empty of students and the teachers would be able to engage in sustained individual and group planning.

--Wednesday would provide the teachers with the opportunity to schedule special tuition sessions for individual students.

--Teachers would be able to spend Wednesday for the purpose of "professional development."

These teachers perceived the innovation as a means whereby they would be able to obtain more time to perform their regular professional duties. For the most part, they were not anticipating any radical change in their role, or in the operation of the school as the result of the change in schedule.

3. To enable the students to make more effective use of their time under a compressed teaching week.

This objective was complementary to the previous one, but here the emphasis was placed on the benefits accruing to the students rather than to the teachers from a compressed week. Predictably, there was a large overlap between those teachers citing this and the previous objective. Four teachers considered that the major objective of the compressed week was to provide the students with more unstructured time. Another six mentioned it as a secondary objective.

There were similarities between this objective and the first. The important distinction lay in the emphasis each objective placed on how the student would fill his time on Wednesday. The responses classified under the first objective all referred to the potential offered for obtaining a well-rounded education through the Wednesday program of activities. That is, the opportunity to provide an enriched program for the students was the focus for this objective. The responses classified under the third objective referred to the unstructured opportunities offered to the students by a free day on Wednesday.

Students would be free to spend Wednesday as they wished, but a few possibilities were mentioned. Students would be able to use Wednesday to complete assignments, to travel into the city to visit the museum, to take part-time jobs, to help their parents around the house, and to enjoy the break in any way they saw fit.

These teachers perceived the innovation as the means whereby the students would be able to obtain more time to do some of the things they found difficult to do during a regular five day school week. As far as these teachers were concerned, the principal objective of the Plan was certainly not to impose an extra load of activities upon the students.

4. To increase administrative convenience and economy.

While nobody suggested that this was the principal objective of the Plan, four teachers maintained that administrative convenience and economy had been an important objective of the Plan when it had first been endorsed by the teachers. However there was little

agreement as to the specific details of this objective. Two teachers recalled that it had been suggested that the compressed work week would enable the School Board to economize on maintenance and cleaning about the school. They had understood that the janitorial services would be greatly reduced on Wednesday in the absence of regular classes. Furthermore, Wednesday would be free for the execution of larger maintenance and cleaning jobs which previously had to be performed at extra expense in the weekends. Vandalism, much of it occurring during recess and spare periods, would also be greatly reduced under a compressed week.

One teacher saw the idea of using the school facilities more economically as being one of the important objectives which had influenced the School Board in favor of the Plan. He thought "... it would tighten up on loose time, reduce the number of kids wandering about the school breaking things, and also make the school available for other activities." Another teacher took this objective one stage further. He believed that the primary objective of the School Board had been to save money, and the Wednesday activities were seen as a way of providing a broad range of supplementary activities at almost no cost to the Board.

5. To reduce the problem of supervision.

Only one teacher perceived this as being the major objective of the Plan, but another three mentioned that one of the objectives of the compressed week had been to reduce the amount of supervision duty each teacher would be required to perform. Under the compressed schedule, the lunch and morning breaks were to be drastically cut,

leading to a corresponding reduction in the supervision duties.

The teacher who identified this as being the major objective also mentioned the matter of supervision during preparation periods. According to this teacher, the administration had been in the habit of asking teachers to substitute for absent teachers during their one preparation period of the day. He believed that the main objective of the compressed week was to eliminate all preparation periods and most non-teaching time during the school day, thus reducing the supervision duties of the staff to a much lower level.

6. To promote the involvement of the local community in the life of the school.

Two teachers saw this as being the most important objective of the Plan, while another three teachers mentioned it as being a significant secondary objective. These teachers perceived the introduction of the four day week and the Wednesday activities as an attempt to follow the current trend towards greater community involvement in schools. Most of these teachers saw the innovation as being the work of the Superintendent, and believed that his purpose in introducing the innovation was to continue with the kind of community involvement program he had operated in previous school systems.

7. To enable the teachers to work a more relaxed and enjoyable four day week.

Three teachers believed that the most important objective of the Plan was simply to enable the teachers to work a four day week. Another two teachers mentioned this as being an important contributing objective. One of these teachers perceived the innovation as being

" . . . geared towards the current trend in industry and elsewhere to less work and more recreation. Part of the general trend towards a four day week in industry." Two teachers believed that " . . . people might like a break in the middle of the week." Or even more simply, "I think the basic premise was that if we could do something in four days instead of five--why not?" To some extent, the innovation was its own objective for these teachers.

8. To improve relations between the staff and the students.

Three teachers understood that an important objective of the Plan was to improve relations between the staff and the students. These teachers believed that the unstructured time on Wednesday, as well as the Jordan Plan activities, would provide the opportunity for teachers to interact with students on a less formal basis than in the classroom.

9. To promote a distinct school identity.

One senior teacher believed that the promotion of a distinct school identity for Jordan High School was an important objective of the Plan.

When I came to the school I felt it had no identity. . . . I felt the students had no identification with the school. . . we needed something to make both the teachers and the students proud of the school, following the dictum--"Dare to be Different" (Recorded Interview).

10. To increase the pressure on the students within the academic program.

For one teacher, an important objective of the Plan was, . . . to put some pressure on both the students and the teachers to fulfill the academic requirements under a compression system, and yet at the same time for the students and teachers to do other things (Recorded Interview).

This teacher believed that the moderate pace of the school's academic program offered insufficient challenge to most students. He believed they would benefit from being made to cover the same academic program in four days instead of five.

This categorization of objectives was necessarily arbitrary. It might have been possible to collapse the teachers' responses still further to just four or five, and it would certainly have been possible to have described the objectives in more than ten categories. These ten categories were chosen as best illustrating the range of objectives held by teachers, while at the same time it was a manageable number. It should be remembered that most teachers mentioned more than one objective for the Plan. Furthermore, individuals varied as to their certainty about the objectives. Two young teachers who had joined the school during the 1973-74 school year could only guess what the objectives of the Jordan Plan might be from their observation of the program in operation--they had never been informed of the official objectives or purpose of the Plan.

The Impact on the Students (Part IIIA)

The third section of the schedule was an attempt to discover the teachers' perceptions concerning the impact of the Jordan Plan on the students.

Question: Is there a significant discipline problem in this school? Is it related to the Jordan Plan in any way?

The subject of discipline had been mentioned frequently by teachers in connection with the Jordan Plan. These two questions

were an attempt to discover how many teachers perceived this link.

Twenty-five teachers stated that the school did have a significant discipline problem. Of these 25, eight saw a direct link with the Jordan Plan. They tended to blame the Jordan Plan for a number of disruptive effects: the unsettling effect of breaking the school week into two halves; the increased fatigue of students caused by the longer school days; the strain of being part of an "innovation experiment"; and, as one teacher put it, "the total atmosphere or license" among the junior high school students which he attributed to the free Wednesday.

Another ten teachers believed that the Jordan Plan might have some influence on the level of discipline within the school, but were not prepared to attribute full blame to the Plan. The remaining 11 teachers, comprised four who believed that the standard of discipline was quite satisfactory, and seven who did not believe that the poor discipline in the school was in any way related to the Jordan Plan. These seven placed the blame elsewhere than the Plan. Some stated that the discipline problem was no better and no worse than it had been in previous years. A few blamed the parents and the nature of the community for whatever undesirable behavior traits the students exhibited. A great many of the experienced teachers placed at least some of the blame on the fact that a disproportionate number of the younger, inexperienced teachers on the staff were teaching at the junior high level of the school. Without adequate supervision, and without more direct assistance from their senior colleagues or the administration, these younger

teachers were having trouble managing their students.

Question: Has there been any significant change in the level of academic achievement since the introduction of the Jordan Plan?

One of the concerns of both parents and teachers had been that a four day week might lead to a weakening of academic standards in the school. In spite of an official inspection visit by a team of officers from the local Regional Office, no attempt was made to conduct any formal, comparative analysis of academic achievement. In answering this question the teachers were relying on their own professional judgment. However, the response was almost unanimous.

All but two of the teachers were emphatic in claiming that the Jordan Plan had made no perceptible difference to the level of academic achievement in the school. Most teachers reported finding themselves at approximately the same point in their syllabi as they had been at the same time in previous years. A small number of teachers reported that they had conducted tests of their own to compare the achievement of their students with those of the previous year, with an almost identical distribution of results. Most teachers would have agreed with the following statement by a teacher: "Nobody expected any great improvement in academic levels. It was never one of the objectives of the Plan. And we did not find any changes."

One teacher thought there had actually been some improvement among his high school students owing to the greater scope for individual study under the new schedule. Another teacher, thoroughly jaundiced about the whole Plan, believed that his classes were performing

at a lower standard than in the previous year.

Question: Has the longer school day resulted in any significant increase in fatigue among the students?

Twelve teachers maintained that they could detect no increase in fatigue among the students as the result of the new schedule. Another five teachers thought that there had been some additional strain and fatigue at the beginning of the school year, but that, in a matter of a few weeks, the students had adopted to the new schedule with few apparent ill effects. Only 12 teachers believed that the students were significantly more fatigued than they had been in previous years. These 12 teachers tended to be the same teachers who saw the Jordan Plan as being a cause of poor discipline in the school. Mostly from the junior high school level, these teachers complained that their students were frequently too tired to work productively towards the end of the afternoon.

Question: Do you spend any more or less time with students outside the classroom situation than you did in previous years?

Ten teachers maintained that under the new schedule they were able to spend more time with students than they had been able to before. These teachers were mainly those who helped in the supervision and operation of the Wednesday program of activities, or those teachers who did a lot of tutoring and counselling on Wednesday. Another 13 could detect very little difference, while six teachers claimed they now had less contact with students than before. Teachers in this latter group tended to be engaged in very few extra-curricular activities. In previous years much of their

contact with students outside the classroom had been while performing supervision duties. Under the new schedule, most of the supervision duties had been abolished, leaving these teachers with very few occasions to meet students in an informal setting.

The Impact of the Jordan Plan on
the Teachers (Part IIIB)

The questions in this section were designed to discover how the teachers perceived the Jordan Plan had altered their work. The first set of questions related to the teachers' perceptions of their work during the four teaching days.

Question: Do you find that teaching a four day instructional week is any more or less emotionally or physically taxing than a five day week?

Eighteen teachers, or nearly two-thirds of the staff, replied that they did consider the new schedule to be more taxing. Another eight teachers believed that there was no appreciable difference, and two teachers claimed that they found the four day week actually less tiring.

One teacher said she found the new schedule less tiring because the more intensive schedule seemed more compact:

I actually find it better because I find that I work better when I am under a bit of pressure, and I think that the kids work more steadily too. Last year it seemed that we kept thinking we had all the time in the world to finish courses and assignments, but this year we have to keep up the pressure all the time (Recorded Interview).

Another teacher, who had arrived as a first year teacher just two months before the end of the previous school year, found the four day week less taxing because he was able to use the free Wednesday

time for preparation and planning that he had been unable to do before. He stated:

Personally, I find it so much easier it is like the difference between night and day. I used to find myself spending six to seven hours a night sometimes on preparation. Almost to the point of being too tired the next day to teach. Being a first year teacher, preparation time is very important, and that is why I find the Wednesdays so valuable (Recorded Interview).

Several teachers indicated that the work loads had increased, and that they were becoming more tired, but they still preferred the tighter schedule of the four day week.

Personally, I find the four day week very functional. I can really put out for those four days. I'm pretty tough in my curriculum. I expect a lot from my students . . . and we can do this if we know that there is going to be a break in the middle of the week. I don't think I could expect this kind of work over a five day week. Each day certainly is more difficult. I am very tired by the end of the day (Recorded Interview).

A number of teachers, particularly the older ones, reported that they had experienced some difficulty with the new schedule in the first few weeks, but most had been able to accustom themselves to the new work week. Others found that the altered schedule had remained appreciably more tiring, but that factor was adequately compensated by the free Wednesday. Only a minority of teachers continued to find the restructured week seriously fatiguing. A few of these were first year teachers who perhaps lacked an adequate standard of comparison, but several had taught under a five day week before. These teachers admitted to being ". . . physically and mentally exhausted after a day of schooling"; ". . . just pooped at the end of the day"; and ". . . getting more and more beat after school." Another teacher, who considered that he could handle the extra load quite adequately, had this to say about the latter

individuals:

Yes, it is more taxing, but the people who really feel it are those who would have difficulty working under any normal system--the weak teachers. Sometimes you can't even talk to them. They are edgy and totally drained. I get drained too, but the difference is that I am able to change my attitudes and behavior to fit in with the new situation. For a rigid teacher, any change tends to be viewed as threatening. They suffer more than anyone else because they refuse to change (Recorded Interview).

The first part of this observation was certainly borne out. It was the less experienced teachers, and the teachers under other unusual pressures, who tended to find the four day week so exhausting. For these teachers, the extra load of the new schedule carried several of them dangerously close to the line between being able to cope and not being able to.

Question: Do you find the new 50 minute period significantly different from the old 40 minute period?

Twelve of the staff expressed a definite preference for the longer period; eight teachers believed that the change had made little difference; and the remaining nine preferred the shorter period length.

The strongest supporters of the new longer period were teachers at the high school level, and teachers of mathematics, science, physical education and art and crafts. High school teachers found their students capable of maintaining attention for the full period, and the extra time allowed them to adopt a more flexible approach to their lesson preparation. Teachers in the subject areas indicated found that the extra ten minutes helped to solve a chronic time problem. All these subjects have one thing in common. The

typical lesson in each area follows a common pattern: first the presentation of new information, and then a period of time for the students to practice this new skill. The extra ten minutes allowed the student in maths to spend longer doing examples; the student in science to spend longer in duplicating the teacher's demonstration; the student in physical education to spend longer performing whatever activity or game he had been taught; and the student in art and crafts to spend longer working on his own projects. Teachers in these areas also benefitted in one other respect. Under the four day instructional week, the administration found it impossible to schedule 100 minute double periods for any classes. This meant that, typically, a teacher would have 50 minutes with his class in the morning, and another 50 minutes with them in the afternoon. Teachers in these areas found it very useful to spend the morning period on instruction, and the afternoon period on directed individual study.

The eight teachers for whom the new 50 minutes period had made little difference tended to belong to the social studies or English areas. Teachers in these areas tended to find that the extra ten minutes in each period were absorbed without any noticeable effort or effect. Those teachers who found the 50 minute periods unsatisfactory did so for several reasons. The industrial arts teachers considered that their work suffered considerably owing to the elimination of the former 80 minute double periods. The morning and afternoon period system, which worked so well for teachers in science and physical education, was most unsatisfactory for industrial arts.

A few of the older, more established teachers complained that

the Jordan Plan had forced them to replan all their lessons. Lessons that had been prepared in previous years for periods of 40 minutes needed to be modified for the longer periods.

The only other criticism came mainly from a group of teachers at the junior high level of the school. They considered that 50 minutes was too long to require a junior high school student to maintain attention, especially in the late afternoon when students were already tired and fractious. One claimed:

If you are able to hold the attention of a student in junior high for ten to 15 minutes you are doing pretty good. To hold him for 40 minutes, that's excellent. But 50 minutes, that's fantastic (Recorded Interview).

This opinion tended to receive some support from a few of the more senior, high school level teachers who taught the occasional class at the junior high level.

Question: How do you spend your time on Wednesday? Which activity takes up most time?

Each teacher was asked to give an account of how he spent the average Wednesday, and then to indicate which activity normally occupied most time. Thirteen teachers said that planning and preparation for their lessons took up most time; five teachers, mostly the subject coordinators, stated that departmental planning and organization took up most time; four teachers spent most time tutoring or counselling students; two teachers reported that they spent most of each Wednesday supervising Jordan Plan activities; and the five remaining teachers were unable to identify any single activity that consistently took up more time than any other.

This distribution was a fair indication of the diversity of

ways in which teachers chose to spend Wednesday. Throughout the year, there was very little pressure brought on the teachers to conform to any pattern of activity on Wednesday. The only calls the administration made upon the teachers' time were for staff meetings called approximately every two weeks, subject coordination meetings held very irregularly, and twice-yearly interviews with all parents.

The 13 teachers who spent most time on individual preparation were mainly first year teachers, and those older teachers who were not actively engaged in extra-curricular activities. These teachers would do their preparation in their homerooms, in their subject area workrooms, or in the general staff room. At any time on a Wednesday morning there would be a group of about five or six teachers marking written work, reviewing lesson plans, drinking coffee and talking amongst themselves. Another two or three teachers might be photostating class materials, and the remainder would be out of sight in various parts of the school.

The chance to spend this time for individual preparation was probably the most commonly cited benefit that the teachers derived from the Jordan Plan. A few teachers, particularly those few who rarely did any preparation on Wednesday, believed that the new schedule had done nothing for their own lesson preparation; but the majority of teachers firmly believed that they were better prepared as a result of this time spent on Wednesdays. However, only slightly less than half the teachers listed this individual planning and preparation time as their major activity on Wednesday. The range of activities among the remainder of teachers could best be illustrated by means

of a few examples. One teacher spent at least four hours every Wednesday coaching the basketball team. Two other teachers spent at least two hours every Wednesday throughout the school year developing an entire new social studies syllabus for grade ten. Several teachers put in large amounts of time at other extra-curricular activities such as supervising the Students' Union activities and preparing for graduation. One teacher took advantage of the new schedule to participate in a training course which happened to be scheduled on Wednesday afternoon.

Teachers were allowed complete personal discretion in the use of their time on Wednesday. Every teacher perceived that he or she was making profitable use of this unstructured time, and resisted most strongly any attempt to reimpose any form of structure. Many tended to resent the time spent at staff meetings, believing that the time could be more profitably spent at other activities.

Question: How much time do you spend in tutoring or counselling students on the average Wednesday?

One of the stated objectives of the Jordan Plan had been to allow teachers to provide students with extra tuition and counselling on Wednesday on a mutually voluntary basis. The purpose of this question was to determine how much time was in fact being spent in this manner, and how teachers perceived this activity. Four teachers listed tutoring and counselling as the activity which took up most of their time on Wednesday. Another seven teachers reported tutoring students on a regular basis, usually for an hour or so each Wednesday. The remaining 18 teachers reported doing only occasional tutoring,

or none at all, on Wednesday.

Almost all of the teachers who reported tutoring on a regular basis on Wednesday were from the maths-science area. A few teachers in the social studies area or the English area reported the occasional student requesting help, but these represented only a small fraction of the students requesting help in maths and science. Many teachers considered that the reason for this discrepancy related directly to the nature of the respective subjects. Students needing extra help in understanding a particular mathematical process could recognize this need, and the teacher could address his tuition directly to the students' needs. A deficiency in other subject areas, on the other hand, was less easily recognized by the student, and not as amenable to short term coaching or tuition. However, the experience of one social studies teacher seemed to contradict this belief:

After the staff meeting there is usually an hour or more till lunch. That hour is a difficult one, and I usually see about 40 students during that time on a Wednesday. They will come in with assignments and difficult projects they are working on. Otherwise, I am giving help to a small group of very weak students from my grade seven social class (Recorded Interview).

A small number of teachers made a deliberate effort to use at least part of Wednesday to meet some of their students in an informal setting. The new timetable had drastically limited the number of occasions when teachers could meet their students outside of class, and these teachers took the opportunity offered by the unstructured Wednesday. Some of them made this contact through supervising Jordan Plan activities, and other organized sporting and extra-curricular activities, but two or three teachers made an effort to meet their students on an individual, informal and conversational basis.

Although many teachers used Wednesday for tutoring and counselling students, the general consensus among the staff was that there was no more tutoring being given in the 1973-74 year than there had been during the year before. All teachers indicated a readiness to give tuition on Wednesday if they were requested to do so by a student, and most attributed their small amount of tuition to a lack of interest among the students.

Question: What time do you usually leave the school on Wednesday?

When the teachers had originally voted to accept the introduction of the Jordan Plan they had agreed to attend school between the hours of 9 a.m. and 12 noon each Wednesday. The purpose of this question was to discover how teachers perceived this requirement, and how it was being observed. Only two teachers admitted that they regularly left the school grounds on the stroke of 12 noon; another seven said they were generally away by 2 p.m.; 15 teachers claimed that they normally stayed till some time between 2 and 4 p.m.; and four teachers stated that they rarely left the school till after 4 p.m. From general observation, this distribution would seem to be a reasonable, if slightly overstated description of the attendance on any Wednesday afternoon. Rather more than two teachers commonly gave the impression of merely waiting about the staff room till 12 o'clock.

The great majority of teachers stated that there had been no pressure from any source to stay beyond noon, and that their own attendance in the afternoon was purely voluntary. A few teachers

manifested some covert resentment at the small number of teachers who regularly left the school as soon as the morning was over. These former teachers professed not to be able to understand how the latter teachers could prepare adequately for their classes without staying at school on Wednesday afternoon. Many teachers were under the mistaken impression that only a small handful of teachers remained at school for any length of time on Wednesday afternoon. In fact, the majority of teachers stayed till at least 2 p.m. on a regular basis, working for the most part in their individual classrooms and workrooms where they were not readily visible to their colleagues.

A few teachers believed that the administration had exerted indirect pressure on teachers to remain at school for some of the afternoon. These teachers were all from the "early leavers" group. They reported that on one occasion the Principal stated that it would not create a good public impression if 30 teachers were seen to make a dash for the parking lot at the stroke of noon. They also reported that on several occasions the administration had scheduled parent-teacher interviews in the teachers' free time on Wednesday afternoon. However, most teachers seemed unaware of any such pressures, direct or indirect.

Interpersonal Relations Among the Staff (Part IIIC)

The purpose of this section was to discover the teachers' perceptions concerning the interrelationship between the altered schedule and the personal relationships among the staff. This was based on the assumption that if teachers saw a relationship between the two, then their perception of one would affect their perception of the other.

Question: Do you have any more or less time in which to interact with other teachers as the result of the altered schedule?

Sixteen teachers claimed that under the four day instructional week they had more time in which to interact with other teachers; four believed there was little difference; and nine believed they had less time.

The 16 teachers who believed that they now had more time in which to interact with other teachers felt that the free time on Wednesday more than compensated for the loss of the long lunch and morning recesses of the old five day week. A great many teachers welcomed the opportunity to sit down in an unhurried atmosphere on Wednesday morning and talk with their colleagues. Some teachers, either from choice or because of other conflicting activities, did not spend very much time in the staffroom on Wednesday. These teachers complained of the lack of contact with their colleagues. Half hour lunch breaks proved insufficient for any more than the most fleeting exchanges between staff members. Lacking this collegial contact, these teachers frequently expressed feelings of isolation from the rest of the staff. The experience of the music teacher provided an example of this:

I probably interact with the staff less than anyone. Because of my music, I eat with the staff approximately three times a year. On Wednesdays I generally have things to do that prevent me from sitting in the staffroom (Recorded Interview).

Question: Has the four day week brought the staff any closer together, or the reverse?

The purpose of this question was to determine firstly, whether

the staff perceived any change in the level of interaction among the staff during the year, and secondly, whether they considered the Jordan Plan had any influence on this interaction. Only half the staff perceived the Jordan Plan as a significant factor affecting the level of interaction among teachers. Six teachers considered that the altered schedule had served to bring the staff closer together as a social and professional unit. The following opinions typify the reactions of those teachers:

I think it is a closer staff now. During the normal week we are rushed for time, and rarely get together for discussions. Now with Wednesdays, we seem to be assisting each other more, and it is more relaxed. Those of us in a specific area get more time to discuss than we did before (Recorded Interview).

It's given all members of the staff time to talk to each other. Last year, in the two months that I was here, I only got to know two teachers well enough to be able to talk with them in a relaxed fashion about non-teaching matters. One of the things I enjoy most about Wednesdays is the opportunity to sit down with teachers from other areas and talk about experiences. There is a much more general base. I've found that I have got to know everyone much better (Recorded Interview).

One teacher somewhat cynically attributed this increased camaraderie to a kind of Hawthorne effect. "They are all in the same boat with this Jordan Plan," he suggested. "They are pioneers, or some of them think they are. They can get together to complain, and pat themselves on the back."

Another nine teachers believed that the four day week had contributed to a deterioration of the interpersonal relations among the staff. While the teachers mentioned above tended to focus on the positive effects of the free Wednesday, these teachers tended to focus on the constraints imposed by the crowded teaching days.

Last year there was a lot of time to spend in the staffroom either at morning break, lunchtime, or in the spares. Now there is very little time other than Wednesday (Recorded Interview).

The staff don't have time to meet together. Now they go to their own little corners on Wednesday and do their preps. And on the other days the lunch hour is so short you hardly have time to eat, let alone talk (Recorded Interview).

One teacher claimed that the level of interaction among the staff was worse than in the preceding year because of the continuing bad feelings about the Jordan Plan among the staff, and the way in which the Plan had been introduced. Another teacher claimed that the teachers were now too tired to fraternize in the way they had in previous years. "Ever since the Jordan Plan started," he claimed, "I've never been to the bar after school. Last year a lot of us used to go regularly. Now everyone seems to go straight home after work."

The remaining 14 teachers were unwilling to attribute any changes in the patterns in interpersonal relationships to the Jordan Plan. Some saw no appreciable change over previous years, while a great many others perceived a gradual weakening of the interpersonal bonds within the staff over the previous year or two. Their reasons for this trend can best be explained in the following section.

Question: What is the present state of morale among the staff? Can you think of any reasons why it should be at this level?

This question was included in the schedule when it became apparent that a number of the staff considered the morale to be a problem. Opinion appeared to be divided. Some teachers seemed to think that the Jordan Plan was largely responsible for a lowering of morale, while others seemed to identify other causes for this

morale drop. The purpose of this question was to uncover the issues which teachers perceived were affecting staff morale, to discover how teachers considered the Jordan Plan to be influential, and conversely, to discover the effect that the general level of morale was having on the implementation of the Plan.

Nineteen teachers believed that the morale among the staff was low--either worse than it had been in the previous year, or lower than in other schools they had experienced. Ten of the teachers believed that the low morale was unrelated to the Jordan Plan. A number of factors were mentioned, and no attempt was made by the researcher to verify or evaluate them. Many teachers who had been at Jordan High School for an extended period of time attributed some of the morale problems to the rapid growth of the school. According to these teachers, during the first three or four years of the school's existence, the staff had been fewer than 20 in number, and of necessity, very close knit. With such a small staff there was no room for cliques and divisions among the staff, and it appeared that the staff had been a relatively harmonious group. Rapid growth in the size of the school had meant a doubling in the size of the staff over the previous two years. Many teachers believed that this rapid growth in the size of the staff, and the high turnover rate among teachers, had tended to weaken this spirit of unity and togetherness. Teachers complained of social distinctions being drawn between senior and junior high school teachers where no distinction had formerly been drawn. They also claimed that there was less collegial and social interaction between the sexes than there had been before,

and they complained of a growing distance between teachers of different teaching disciplines. They also detected a greater tendency towards the formation of cliques than had been the case a year or two before.

Another large section of opinion considered that the low morale was related to the question of discipline in the school. This matter is dealt with more fully in a later section. However, it was seen to have definite implications for morale. The discipline problems were contained mainly in the junior high school level. The majority of teachers at this level were teaching in their first or second years, and experienced some problems with discipline. There was a division of opinion among teachers as to what should be done to relieve this problem; some teachers believed that every new teacher must learn to master the discipline situation himself, while others believed that these young teachers should have been getting more assistance and reinforcement, both from the administration and from their more senior colleagues. Regardless of which opinion was favored, teachers who saw the discipline as a problem in the school also saw it as a weakening force on teacher morale.

Individual teachers had their own ideas about why the morale was low. At least one teacher considered that the problem lay in a lack of administrative and philosophical direction for the school. Others mentioned specific personal animosities among the staff which they believed had a bad effect on the general level of morale.

Of the 19 teachers who believed the morale among the staff was low, another nine believed that the Jordan Plan was in some way responsible. Many of the specific reasons they advanced were mentioned

earlier: the added fatigue, the lower interaction among the staff, the feeling that the Jordan Plan had somehow changed from what it was originally intended to be. One factor which several teachers mentioned was the problem associated with timetabling. Under the four day week the timetabling problems of Jordan High School had been greatly accentuated. While it had always been difficult to provide a wholly satisfactory timetable in such a small school, these problems had been exacerbated by the reduction in the number of teaching days. These problems came to a head at the beginning of the second semester in January, 1974, as teachers jockeyed with one another for the most favorable courses, classrooms and timetables. Inevitably, many teachers ended up teaching courses for which they did not feel professionally suited. This remained a cause of frustration and some bitterness for the remainder of the year.

This somewhat dreary view of staff morale was not held by all the staff. Ten teachers professed to see nothing out of the ordinary about the morale among the staff. Many commented favorably about the high level of interaction among members of staff, and the general air of enthusiasm and esprit de corps among the staff.

One teacher, among the last to be interviewed, suggested that morale was an unstable thing. He mentioned several factors which he believed had upset the morale earlier in the semester, not the least of which was the exceptionally long and cold winter. However, at the time of this interview, the teacher claimed the school year was approaching the end, spring was in the air, and morale was almost back to normal.

Question: Is this a cliquey staff?

The purpose of this question was to provide another perspective on the matter of staff relationships. An important emphasis of this study was to study the relationship between teacher behavior and teacher attitudes. This question attempted to uncover an important area of teacher behavior in order to determine the relationship between the behavior and attitude patterns within the staff. It was realized that the terms "clique" and "cliquey" are emotion-laden, imprecise, and have generally negative connotations. No attempt was made to qualify these terms in the belief that teachers would respond more readily to this direct approach.

Thirteen of the teachers believed that the staff was excessively cliquey--more cliquey than the average school, and, to an undesirable degree. Another 12 stated that the school did contain several cliques, but these teachers were not prepared to admit that the situation was any worse than at any other school. Just four teachers denied the existence of any cliques within the staff.

The 12 teachers who believed that the staff exhibited only an average degree of cliquishness, tended to identify general rather than specific factors. Many mentioned the social distance that seemed to exist between the male and female staff. It was frequently observed that the two sexes tended to occupy opposite ends of the staffroom, and talk more frequently within, rather than across, sex barriers. Several teachers observed that informal social gatherings, such as an 'after-school visit to the bar or to a teacher's home, tended to be exclusively male or female. Other teachers, particularly

the younger teachers, detected some social distance between the junior high teachers and the senior high teachers, and also between the younger and the older staff. Most teachers seemed to consider that these kinds of social distinctions were inevitable in any sizeable group of adults, and not necessarily harmful. A great many teachers also considered that the new subject coordinator system had led to a tighter grouping of teachers within each discipline, possibly to the exclusion of the rest of the staff.

The 13 teachers who claimed a high level of cliquishness within the staff, tended to take a more negative view of the situation than the former group. As might be expected, few of these teachers perceived themselves as belonging to cliques. More often they perceived themselves as having been excluded from some clique or other, and accordingly felt somewhat resentful. Three or four cliques were identified, most of them containing up to six members. The younger teachers felt resentful about a group of more experienced, senior high teachers whom they felt held themselves aloof from the rest of the staff; many of the staff were unhappy about the close-knit camaraderie enjoyed among a small group of teachers involved in part of the school sports program; some teachers believed that the teachers in one or two other subject areas considered themselves superior to the rest of the staff. Lacking membership in any of these cliques, and feeling somewhat insecure, several of the younger junior high school teachers drew together in their own little group.

Recreation (Part IIID)

Question: Have you taken any part in Wednesday Jordan Plan activities during the year?

Previous questions measured the attitude of teachers toward the Jordan Plan. The purpose of this question was to provide information that would assist in drawing a comparison of attitudes and actions.

Twenty teachers, or two-thirds of the staff, stated that they had not participated actively in the Wednesday program during the year. Another two teachers said they had previously taken some part, but that they were not currently participating. The remaining seven teachers indicated that they were currently engaged in some form of organized Wednesday program.

Teachers were aware of this low rate of participation, but, with the exception of a few of the more actively engaged individuals, most members of the staff saw no cause for concern in this fact. The consensus appeared to be that the Wednesday activity program was something beyond the regular syllabus, and should be staffed from the community. Teachers recalled that at the beginning of the year the Superintendent and Principal had assured them that they would not be asked to participate if they did not wish to. Few wished to. Most indicated that they found the average Wednesday quite busy enough without taking on the additional load of a Jordan Plan course. Some teachers indicated that they had, at one time or another, expressed interest in conducting a particular activity, but, for a variety of reasons, the activities never eventuated.

The small group of teachers who were participating in Wednesday courses seemed to be prompted by a variety of motivations. Several of the industrial arts and art and crafts teachers were involved. They saw the Wednesday program as an opportunity to make their subjects available to a larger number of students than was previously possible during the regular school days. Others maintained that their principal motivation was to be able to relate to the students in a less formal context than was possible in the classroom. The primary motivation for the remaining two or three teachers seemed to be a sense of obligation: an obligation to the students to provide supervision for various activities, and an obligation to the school itself to ensure that the Jordan Plan continued to operate successfully.

Question: What is the extent of your involvement in other extra-curricular activities?

The purpose of this question was to provide information that would complement that obtained from the previous question--to be able to distinguish between the teachers heavily involved in extra-curricular activities and those with few such commitments. Nine teachers admitted doing very little extra-curricular activity. In any week these teachers would do probably less than an hour of such activity. Another 12 teachers claimed to spend about three to four hours per week on extra-curricular activities, sometimes more, and sometimes less. The remaining eight teachers stated that they put in at least five hours each week on extra-curricular activities. The first group was made up mainly of young, first year teachers, and some of the older women teachers. Most of them noted that with

the new schedule they were spending far less time on supervision than they had in previous years, but none of them felt obliged to increase the amount of time they devoted to other extra-curricular activities. The second group of moderately involved teachers tended to have one or two activities with which they felt personally involved, and which they performed as part of their professional obligation to the school and the students. The eight teachers who claimed to put in five or more hours each week on extra-curricular activities tended to be involved in a wide variety of activities, usually including one or more Wednesday Jordan Plan activity. These teachers generally considered that their professional and moral obligations extended well beyond the classroom, and they tended to resent those teachers who did not think and act in the same manner. Teachers who put in many hours each week coaching sports teams, helping with student activities, counselling and tutoring, and sometimes remaining at school till nearly midnight, felt understandably resentful that their efforts should receive no more reward than the teachers who apparently took no part in any school activities outside their own classroom.

Attitude Towards the School (Part IV)

A number of very general questions were put to the teachers to get some indication of their overall opinion of the school.

Question: Is Jordan High School a good school? How does it compare with other schools in your experience?

This question was designed firstly to determine the teachers' emotional attitudes towards the school, and secondly, to elicit any

comment, either positive or negative, about features of the school which had not been covered by other parts of the interview schedule. Sometimes teachers were hesitant or unsure about how to answer this question. Most were somewhat circumspect and discrete in their answers. The interviewer generally had to clarify the first question by asking how the school compared with other schools the teacher had known. The answers to this question could be reduced quite easily to three categories. Two teachers considered Jordan High School better than average of its kind; 13 considered the school was about average; and 14 considered that the school was somewhat worse than the average. Several positive features were mentioned. Many teachers considered that the relatively small size of the school helped to keep relationships on a more personal basis; several teachers said they were pleased with the high calibre of teachers on the staff; and many indicated they had very good personal relationships with the majority of the staff.

There were also several negative features mentioned. The small size of the school was seen by some teachers as a disadvantage as well as an advantage. Most teachers considered that the composite, junior/senior nature of the school was not beneficial, and looked forward to the time when the school would cater exclusively to the senior high school level. The size was also blamed for the timetabling difficulties, and the inability to provide the students with a broad option program. Another related problem was funding. There was considerable dissatisfaction in most sections of the staff concerning the inadequate facilities in such areas as the library, science

laboratories, and gymnasium. Competition among the staff for these scarce financial resources also tended to create friction among the staff.

Other negative features that were mentioned were discipline problems in the junior high school, trouble with the administration, the development of cliques within the staff, a lowering of staff morale, and the Jordan Plan itself. Most of these factors were discussed previously, and they are re-emphasized in the following chapter, particularly as they were seen to influence the development of the Jordan Plan.

Question: Is Jordan High School any more innovative than the average high school?

Again, no attempt was made to explore the term "innovative" with the teachers. It was anticipated that teachers would have different interpretations of this word, and that some would react positively towards the term while others would react negatively. It was this subjective, emotionally charged reaction that was being sought. The purpose of the question was to elicit the teachers' opinions, considered or otherwise. The same type of scale served to describe their responses. Three teachers considered that Jordan High School was definitely more innovative than the average city high school. Two of these teachers mentioned the Jordan Plan as the only example of this innovativeness, while one teacher believed that there was a high level of progressive, professional awareness among the staff. Eight teachers believed that the school was neither more nor less innovative than the average, while the remaining 18 considered

that the school was less innovative than the average. Most teachers attributed this lack of innovativeness to two factors: the inability of the School Board to fund innovative programs, and the generally conservative attitude of most of the senior staff towards innovation, and towards education generally. This latter feature was mentioned by many, acknowledged as a personal characteristic by a few, and criticized by only two or three.

Question: Does the school possess a distinctive set of goals or objectives? Do you know what these goals are?

The purpose of this question was to determine whether the teachers perceived any clear connection between the stated objectives of the Jordan Plan, and any general goals or objectives of the school. The division of responses was almost identical to that received for the previous question.

Two teachers believed that the school did have a set of goals, and were able to give some general account of what these goals were. Another nine teachers thought that the school did have a set of written goals, but could give only the most general idea of what these goals might be. The remaining 18 teachers said that they were not aware that the school had any goals. They certainly could not remember seeing or hearing any.

The two teachers who believed that the school did have a definite set of goals suggested that the main goal was a re-emphasis on a balanced education. Both teachers believed that it was an official policy of the school to stress the development of the whole child, with the emphasis being placed on the development of attitudes

and values, rather than exclusively upon academic excellence. Several other teachers interpreted this goal from the direction of the school activities, but were not able to say whether this was an official goal. The following two statements were typical of the reaction of many of the staff:

Somewhere there is a whole wad of material that was printed with the philosophy of the school on it--I haven't seen it since it was printed five years ago (Recorded Interview).

Does the school have a set of goals? Yes and No. Yes, I can tell you where I think the school should be going, but no, I don't think that the staff as a group have a definite set of goals for this school (Recorded Interview).

Commitment to the Jordan Plan
(Part V)

This section contained a number of questions designed to confirm and summarize impressions already solicited by earlier questions, and also to assess the teachers' general level of commitment to the Plan.

Question: Has the Jordan Plan developed in the way you anticipated?

During the period of exploration, one of the most widespread criticisms of the Jordan Plan had been that the Plan had developed in a way different from how the teachers had anticipated. This question was designed to discover how widespread this feeling was. Fourteen teachers, or almost half the staff, stated that the Plan was significantly different from what they had anticipated when they had voted on the Plan in the previous year, or when they joined the school in September, 1973. Another seven teachers found the question difficult to answer because they claimed never to have had a clear

idea of how the Plan was going to develop. The remaining seven teachers were not at all surprised at the way the Plan had developed: some had wanted the Plan to develop in this way, while others had realized that certain pressures already working within the system as early as the 1972-73 school year would force the Plan in the direction that it eventually did take.

The teachers who found the Plan different from what they had anticipated were almost exclusively teachers who had been on the staff during the previous year. For the most part they claimed to have been attracted to the Plan as it was originally presented to the staff by the benefits it seemed to offer them. They later discovered that, with the switch in emphasis from teacher-centred objectives to student-centred objectives, many of these anticipated benefits were more illusory than real.

The teachers who found that the Plan had developed more or less as they had anticipated were of two types. Most of this group were keenly interested in broadening the scope of the educational program and in involving the community in the educational process. These teachers had seen the potential of the Plan for this kind of development, and had welcomed it. The remaining two members of this group were among the few teachers who had expressed their dissent from the majority decision to go ahead with the Jordan Plan in May, 1973. These two teachers stated that they had foreseen many of the negative features of the Plan from the beginning--the pressures of a 350 minute instructional day, the dislocation of the timetable, and the preempting dominance of the Wednesday activity program over

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all other activities that might be scheduled for Wednesday.

Question: How would you react if the Board were to cancel the four day week at the end of this year?

This question was designed to gain an indication of the level of commitment to the Plan. The Principal's questionnaire had indicated a generally positive response from the teachers. However the questionnaire had not asked whether the teachers favored a continuation of the Plan. Furthermore, discussions with teachers had indicated that many of them were reluctant to impose their personal feelings on the system as a whole. This question attempted to relieve the teachers of the responsibility of deciding on the fate of the Plan, and asked merely for their reaction in the event that the Board cancelled the Plan.

Nineteen teachers stated that they would be disappointed if the Board were to cancel the Plan; four teachers said they were indifferent to whether the Plan continued or not; the remaining six expressed themselves in favor of any move to abandon the Plan.

The level of commitment among the staff seemed to vary considerably. About six or seven of the staff identified themselves very closely with the Plan, and what they perceived it was doing for the students and the community. However not all of them expressed themselves as emphatically as one teacher. "I hope this thing lasts," he said, "I think this community idea, . . . God, it's the only answer for us. I'd hate to see it thrown out." The bulk of the teachers saw the decision as a tradeoff between the advantages and the disadvantages. Most teachers saw the Plan as a definite improvement

in the kind of program that the school was able to offer the students; most teachers saw a number of advantages to themselves from the altered schedule; and many seemed willing to put up with certain disadvantages and inconveniences in return for these factors.

There was a similar range of feelings among those who favored the abandonment of the Plan. Four of them had applied the same kind of mental balances to the perceived advantages and disadvantages, and found there were more disadvantages than advantages. The remaining two teachers remained implacably opposed to the Plan. One of them foresaw a rising tide of parental opposition that would soon force the School Board to cancel the Plan. "I don't think it has succeeded in what it set out to do," he said. "I don't think it will last another year."

Summary

In this chapter the inspection phase of research was described. The focus of this phase of the research was identified as the perceptions and behavior of the teaching staff of the school with respect to the Jordan Plan. More particularly, the researcher wanted to discover the relationship between teachers' perceptions about the objectives of the Plan, and their attitudes and involvement in it. An interview schedule was drawn up and administered to all members of the staff. The balance of the chapter was an outline of the salient trends and tendencies as indicated by an analysis of the data from the schedule. This information did indicate a close link between teachers' attitudes, perceptions and behavior with respect to the Plan.

It was left to the following chapter to try to assemble these relationships into some kind of pattern.

CHAPTER 6

ANALYSIS OF FINDINGS

The purpose of the interview schedule was to uncover the relationship between meaning and action with respect to the Jordan Plan. Symbolic interactionism would suggest that people would act towards the school and the Jordan Plan on the basis of their perceptions of each. It would also suggest that perceptions and involvement in one would affect perceptions and involvement in the other.

The truth of these assumptions was quite apparent throughout the period of interviewing. Teachers had very different perceptions of what the Jordan Plan was or should be, and these perceptions visibly colored their attitude to, and involvement in the Jordan Plan. Furthermore, teachers with particular types of experience and background seemed to have distinctive attitudes towards the Jordan Plan. The converse also seemed to be true. People who had strong opinions one way or another about the Jordan Plan tended to have strong opinions about various aspects of the school program.

The connection between meaning and action with respect to the teachers' involvement in the Jordan Plan was found to be pronounced. However, the nature of the data did not permit a sophisticated, statistical demonstration of this relationship. Response categories, crude as they were, were imposed on the data after the interviews had been conducted, and therefore did not lend themselves to sophisticated computation. Furthermore, the small number of respondents

imposed unrealistic demands on the data. Relationships between variables would have to be extremely strong before they would show as statistically significant. It had never been intended that such statistical techniques should be used, so the inability to do so at this stage was no handicap.

It was found that a meaningful division could be made among the teachers on the basis of the goals and objectives each teacher held for the Plan, and the strength with which these objectives were held. The staff could be divided into four distinct groups on the basis of the goals and objectives each teacher held for the Plan. Within these groups certain common characteristics could be identified. Teachers who shared the same general orientation towards the Jordan Plan tended to share similar attitudes and modes of professional behavior in other aspects of school life.

Group I

The members of this group were distinguished by their firm dedication to the objectives formerly identified as Objectives #1 and #3 of the Jordan Plan. Objective #1 was to enable the school to provide a more balanced education to students by means of the Wednesday program of activities, and Objective #3 was to provide students with more unstructured time to devote to activities that interested them. As far as these teachers were concerned, the four day week and Wednesday activities were introduced in order to improve the educational experience offered to the students. A great many teachers mentioned this as being a secondary objective of the Plan, but the six members of this group were selected for the strength of concern

which all of them showed for these student-directed objectives over any of the alternative objectives.

The group could be subdivided into two smaller groups, containing the teachers who indicated a preference for Objective #1 and Objective #3 respectively. However, before the unique qualities of each subgroup are examined, there were certain common qualities of the whole group which distinguished the members from the rest of the staff.

The most obvious distinguishing quality of this group was the level of professional dedication of its members. Every member had a well articulated, comprehensive, and consistent philosophy of education. They each saw their philosophy as a working, and workable, guide to their everyday teaching activities--a personal philosophy which they felt able to implement, to a greater or lesser degree, within the overall philosophy of Jordan High School.

Every member of the group expressed himself most strongly on the responsibilities of the professional teacher. Without exception, they saw their primary duty as being to the student rather than to their profession, or to any other focus of allegiance. They all stressed the importance of a broad, humanitarian education, and saw it as an important responsibility of the teacher to go on beyond the syllabus to assist the student in extra-curricular activities. They were all among the most heavily committed teachers in terms of the amount of time they devoted to extra-curricular activities with the students. They all spend a great deal of time each week assisting students outside of the classroom, mostly in sporting and Wednesday

activities. None of them appeared to begrudge the time they devoted to their work, but they did tend to be silently critical of other teachers with less dedication, and fewer extra-curricular activities. This resentment was not restricted to this group of teachers, although it seemed to be strongest here. These teachers were very much aware of the amount of time they were devoting to their work in relation to other less involved teachers, and they expressed considerably satisfaction in this work. Many of this group tended to attribute some of the shortcomings of the Jordan Plan to the lack of involvement of some of the other teachers.

As a group these teachers tended to be strong minded individuals, sure of their own philosophies of education, and sure of their ability. This strength tended to be complemented by an uncompromising attitude towards their colleagues. Having no difficulty maintaining discipline in their own classrooms, these teachers tended to have little sympathy for those who were having trouble in this area. And, working to capacity both inside and outside the classroom, they tended to be critical of those teachers who appeared to be less dedicated and less productive than themselves. All six members of this group were men, and all but one of them tended to view the female members of the staff as being generally less dedicated and less productive than the male teachers, though most were eager to indicate one or two exceptions to this generalization.

It was possible to subdivide this group into two subgroups on the basis of the differential emphasis given to Objectives #1 and #3. A close examination of the data on each individual indicated

a substantial difference between the two subgroups on other variables as well.

The first subgroup consisted of three teachers who placed the strongest emphasis on Objective #1. They maintained that the primary objective of the four day week was to provide activities that would serve to give more balance to the school syllabus. These three teachers shared a similar educational philosophy. It could be described most succinctly as Christian Humanism. All three teachers had strong personal convictions about what a Christian school should be, how a Christian teacher should act, and what should be expected of a Christian student. Central to this philosophy was the neo-Platonist emphasis on harmony in growth. For these teachers, the concept of a balanced education was more than a loosely held institutional goal. The academic component of the curriculum was only part, and not necessarily the most important part, of a good Christian education. Equally important was the development of character among the students. Organized sport occupied a position of high importance for these three teachers. Sport provided a vehicle through which the desirable character traits of perseverance, honesty, selflessness and the aspiration to excellence could be inculcated and strengthened. For these teachers it was not enough that a student should merely participate in a game. He had to strive for excellence as part of a hard-working and dedicated team.

This first subgroup actually saw themselves as being a distinct group within the staff. They had all recently come to the school from a neighboring city school; they were all experienced teachers with

more than ten years teaching experience; they all shared in the sports coaching; and they tended to sit together in the staffroom. They also realized that their singular dedication and philosophy was not widely shared among the rest of the staff.

The second subgroup, from a superficial view, would not appear to have had a great deal in common with the first subgroup. However, they were much closer than probably either subgroup would acknowledge. This group comprised two male teachers in their early twenties--one teacher at Jordan High School for his first year of teaching, and the other in his second year of teaching at the school. Both teachers placed major emphasis on Objective #3 of the Plan. That is, in their opinion, the major objective of the Plan was to consolidate the instructional week in order to allow the students more time for activities of their own choosing. These two teachers shared the concern of the first subgroup that the existing curriculum was not sufficiently broad, and that it did not provide a balanced educational diet for the students, but they differed as to the alternatives they perceived for this situation. While the first subgroup had emphasized the Wednesday activity program, complemented by organized sports, the second subgroup emphasized the freedom for the individual students to spend Wednesday as they pleased. They were particularly anxious to spend more time with students out of the regular classroom teacher role, whether it be as an activity instructor, a tutor, advisor or simply conversational companion. This second group exhibited much less concern than the first subgroup over the numbers of students who were coming to school to participate in activities on Wednesday.

In terms of educational philosophy, these two teachers seemed closer to a humanistic existentialism; not far removed from the Christian Humanism of the first group, and sharing the same concern for the all-round development of the child, but showing less enthusiasm for formal structures and discipline to inculcate desirable qualities of character. The development of the individual along uniquely individual lines was a far more important goal for these two teachers.

A sixth member of the group was included somewhat diffidently. When this teacher first heard about the possibility of a four day week being introduced in May, 1973, he was under the impression that the major objective was to provide the teachers with more time, and that it was a teacher-oriented innovation. However, even before the end of the 1972-73 school year, he detected a change in emphasis for the Plan, and understood that the Superintendent's major objective for the Plan was to broaden the range of activities available to students. This teacher was included in this group of teachers because so many of his qualities concurred with the other members of this group: he quickly came to see and accept the student-oriented objective for the Plan; he participated actively in Jordan Plan and other extra-curricular activities; he had a thoughtful and thoroughly dedicated approach to his work; and he was prepared to go well beyond the call of duty in assisting students. He differed from the other five teachers in two very important respects: he did not appear to share the same level of frustration that the other members of this group sometimes felt for their apparently less committed colleagues; and perhaps related to this, he did not seem to belong, or want to belong,

to any particular social grouping within the staff. Probably no other teacher on staff enjoyed such good relations with all other members of the staff.

Group II

The members of this second group were identified by the firm belief each of them expressed that the original and primary objective of the four day week had been to assist the teacher rather than the student. Many of the teachers in this group acknowledged and approved of the educational benefits accruing to the students from the four day week, but this was not the primary motivation of the group. While their strong adherence to this teacher-oriented Objective #2 was the distinguishing feature, this group had several other features in common.

With one exception, all members of the group had been at the school for the year preceding the introduction of the Jordan Plan. That is, they had all been present when the idea of a four day instructional week had first been mooted. For this reason most of the members of this group expressed little doubt or uncertainty concerning the goals and objectives of the Jordan Plan. They believed that their perception of the objectives of the Jordan Plan was correct because they had taken a leading part in creating the Plan.

Most of the teachers in this group had been teaching at Jordan High School for a relatively long time. The average length of teaching service at the school by members of this group was about three years, with two of the group having been at the school since it opened five years previously. Only one member of the group had started at

the school in the 1973-74 school year. In terms of total teaching experience, the group could be described as being of medium teaching experience--less experienced than the teachers in Group I, but more experienced than the young teachers of Group III--with an average teaching experience of 5.5 years. Three of the five subject coordinators were from this group. This last fact was a good indication of the professional attitude of the teachers in this group. In the main, they demonstrated a highly professional attitude towards their work, but a different type to that demonstrated by the teachers in Group I. The teachers in Group II were more curriculum-oriented than the teachers in the first group, and more concerned with academic achievement, academic standards, and the formal subjects of the syllabus. Most of them exhibited considerable concern and interest for their pupils, but not in the same way, or to the same extent, as the teachers in Group I. To label the first group as being "child-oriented" and the second group as being "subject-oriented" would be overly simplistic. But if such labels were required simply as general indicators of the orientation of group members, then they would serve a useful function.

The teachers in Group II differed in another important respect from those in Group I. While the latter group exhibited, or at least uttered, a dedication to their task that generally went well beyond the minimum professional requirements, the teachers in Group II preferred to retain the right to interpret what those minimum requirements might be. Many teachers in this group did in fact devote a considerable amount of time and effort to tasks which might be described as being beyond the call of duty, but they were well aware

of the limits of professional obligation, and reserved the right to choose whether they exceeded these obligations. Their attitude to administrative procedures and the administration hierarchy illustrated this professional attitude. Teachers in this group considered themselves well educated and competent in their work. They accepted the necessity of administration, and administrators, but were less tolerant when they believed that there was excessive administrative interference in the classroom, or conversely, when the administration expected them to perform extra-curricular duties which they considered not to be within their range of professional duties.

The attitude of members of this group towards the Jordan Plan was most directly influenced by their original perception of the Plan as it was described to them in April and May, 1973. Without exception, the members of this group expressed some level of dissatisfaction with the way the Plan had evolved. None of them thought the Plan had developed in the way they had anticipated. While the degree of disappointment within the group ranged from extreme disillusionment and alienation from the Plan, to mild concern that the Plan might not be fulfilling its original purpose, all members of the group believed that the original objectives of the Plan had somehow been changed or misinterpreted during the 1973-74 school year.

This group had provided the hard core of support for the original idea for a four day week when it was being discussed among the staff during the 1972-73 year. These teachers had been won over to the idea of a four day week by the objectives and advantages touted for such a plan. The major goal, as far as these teachers were

concerned, had been to facilitate the teacher's job by reorganizing the teaching week. These teachers perceived the major benefits of the Plan as stemming from this objective: the freedom to plan and organize on Wednesday; the reduction of time-consuming and unproductive supervision duties; the opportunity to supervise new and spontaneous learning experiences on Wednesday; the chance to meet parents in an unhurried, relaxed atmosphere; and hopefully, the reduction of student absenteeism. As members of this group stated throughout the 1973-74 year, they had understood that this was to be a "teacher thing," and only secondarily a student-oriented innovation.

Within this broad objective teachers tended to have their own reasons for supporting the idea of a four day week. One teacher was under the distinct impression that the prime purpose of the compressed instructional week was to reduce the amount of time spent out of class, and thereby reduce the amount of time teachers would spend on supervision duties. Two other teachers believed that there had been nothing new or radical in the intent of the four day week: "... if you can do something that used to take five days in just four days, then why not?" Other teachers placed different emphasis on the various benefits they had expected to gain from the compressed week. Most teachers tended to stress the value of the extra time for individual planning, while others had anticipated a variety of other useful activities on Wednesday, from syllabus revision to a little afternoon golf in the warmer months.

Some members of this group adapted more readily than others to the way the original objectives of the Plan were subordinated to the

new student-oriented objectives. Of the 11 teachers in this group, four stated that they believed the Plan was making a positive contribution to the life of the school, and would be sorry to see it cancelled; one teacher expressed little concern whether the Plan continued or not; and the remaining six teachers indicated that they would like to see the Plan discontinued. It can be seen that the most sustained opposition to the Jordan Plan came from among this group.

Group III

The six teachers in this group had several features in common which distinguished them from other teachers. Firstly, they were all young and relatively inexperienced; four of the group were first year teachers, and none had taught at the school prior to the 1973-74 school year. Secondly, they all taught the majority of their classes at the junior high school level. Thirdly, all teachers experienced varying degrees of difficulty in handling the discipline in their classes. Fourthly, they were all under the impression that the original objectives of the Jordan Plan had been to benefit the students rather than the teachers. This series of interlocking characteristics served to influence their behavior as individuals, and their attitudes toward, and involvement in, the Jordan Plan.

At the time of being interviewed, only one of the six teachers could recall being told officially by the administration what the objectives of the Jordan Plan were. One teacher, who had joined the staff for a few weeks at the end of the 1972-73 year, recalled that there had been some mention, at a meeting of May 15, 1973, of the purposes of the innovation. He recalled that the administration had

stressed the opportunities afforded the teachers for "professional development" by the altered schedule, and also the opportunities offered to students to participate in a wide range of activities. However, the other five members of this group all maintained that they had not been told of the objectives of the Plan by anyone in an official capacity. On their appointment they had been informed of the altered schedule, but they had been told little about the objectives of the innovation. Talking to other teachers, and seeing the Plan in action, they had come to the conclusion that the major objective of the Plan was to benefit the students. Most of these teachers were not able to be very analytic about this objective. They had concluded, in the absence of any conflicting evidence or opinion, that the Jordan Plan was an attempt to improve the curriculum--something to help the students. As such, their initial response varied from mild to moderate enthusiasm. Perhaps because of their youth and relatively recent university training, all the teachers in this group indicated general support for educational innovation per se.

However, although their initial reaction to the Plan had been favorable, their enthusiasm tended to cool as the year proceeded. One member of the group played an active part in Wednesday activities, but the other five found little time for any work outside the classroom. All six members of the group taught the bulk of their classes at the junior high school level. As in many junior/senior high schools, there was a noticeable distinction between the staff at each level. Younger staff tended to enter at the junior high school level, while most of the senior high school positions went to more experienced

teachers from both inside and outside the school. This tendency had been worsened in the previous year or two by a relatively high turnover rate among teachers at the junior high level. While the difficulties of teaching at the junior high level were openly admitted by the administration, many teachers were of the opinion that the junior high school staff might benefit from a more even share of the more experienced teachers on the staff.

The junior high level had something of a discipline problem; that is, in the minds of the young and inexperienced junior high school teachers such a problem certainly existed. The more experienced teachers, particularly in the senior high school, tended to dismiss this assertion, attributing the incidents of poor discipline to the inexperience of some of the younger and newer staff, rather than to any more basic failing of the school, the community or the students. Whatever the truth of the assertion, all six members of the group became steadily more convinced of the existence of a problem as their own discipline problems became more alarming. The administration tended to take the attitude that poor discipline generally resulted from inadequate preparation or poor teaching on the part of the teacher. Many of the senior staff seemed to share this opinion. As the year proceeded, the group drew closer together in recognition of their common problems. None of the group was willing to admit that his discipline problems were caused solely by his own lack of experience. In their conversations together they tried to find an explanation for the difficulties they were encountering. The nature of the community itself came in for some criticism: some of the teachers

considered that the poor discipline was the result of the students' low respect for the teaching profession, passed on from their well-educated, middle-class parents; others were of the opposite opinion--that the community was predominately lower class, and this was the root cause of the discipline problem. Most of the teachers in this group considered that the approach adopted by the administration to this problem contributed to, rather than reduced, the problem. The administration tended to leave it up to each individual teacher to maintain classroom discipline, whereas these young teachers would have preferred to have been reinforced by a more open show of authority from the administration when necessary.

The Jordan Plan itself began to be a butt for criticism among this group. All six teachers admitted to finding the longer day very tiring, even though most of them, being first year teachers, had no valid standard of comparison. Just as they themselves felt tired, they tended to think that their students were more exhausted by the new regimen. The combination of the longer period and the longer day contributed to the discipline problems they were having, especially in the late afternoon periods. "I certainly find I have been getting more beat after school," one young teacher claimed. "There is no doubt that this four day routine is tougher. I think the brain can only take so much. We don't get many breaks. The afternoon is 150 minutes straight." Another teacher said, "... the last period of the day is really bad. By the last period, those ten and eleven year olds are so tired they just want to get outside and do something physical. I think this is a cause of a lot of the

discipline." Another member of the group admitted, "Yes, I think it is harder with the longer day and the half hour lunch break. This is not long enough. I am physically and mentally exhausted after a day of teaching." This same teacher was most explicit about the relationship between the discipline problem and the new schedule: "I think there must be a relationship. There seems to be differences of opinion among the rest of the staff as to whether the discipline problems are related to the Jordan Plan." This sentiment was echoed by each member of the group. They realized that only a few teachers were having discipline problems, and they realized that part of their difficulties could probably be attributed to their inexperience. However, they all felt that the altered work schedule had significantly worsened the discipline situation, and also significantly increased the pressure of work.

The effect of this perceived increase in work load was worsened by the fact that most of these young teachers felt that their jobs were threatened. Jordan High School was in the process of shedding its composite status, and beginning September, 1974, the grade seven cohort would be retained by the contributing elementary schools. It was anticipated that this change would reduce the number of junior high school teachers required. "There is real pressure on the first year teachers to perform because none of us have tenure," claimed one member of the group, "and there are plenty of others wanting to take our jobs if we are not good enough. The grade sevens won't be here next year, and several teachers will have to be lopped."

Most of the members of this group developed an ambivalent

attitude towards the Jordan Plan. All six approved of the objectives of the Plan as they perceived them; that the altered schedule would allow for a wider range of activities to be made available for the students. They continued to support the Plan, at least in principle, throughout the year. Only one member of the group came out strongly for the discontinuation of the Plan. The other five, however much they might have resented the extra strain, and however much they might have blamed the Plan for their discipline problems, still maintained a basic posture of support for the Plan. In the main, they were unhappy with many of the features of the Plan as it had developed, particularly as they affected them, but they wanted the Plan to be continued for at least another year.

Group IV

A fourth group of teachers posed some problems in the initial attempts to group them. Alike in so many aspects, they seemed to share few common perceptions concerning the Jordan Plan and its objectives. Five teachers were identified as belonging to this group. For the most part, teachers in this group were older than the average staff member. Whereas almost 80 percent of the staff were under 35 years old, all but one member of this group were over this age. All but one of the group had been teaching at Jordan High School for four or five years. All five teachers taught most of their classes at the junior high level of the school. This group tended to be the more experienced teachers at this level in contrast to the members of Group III discussed earlier. In terms of personal and philosophical orientation, the members of this group tended to

cluster towards the "local" end of Gouldner's cosmopolitan-local continuum (Gouldner, 1957).

Members of this group had been at Jordan High School longer than average, they all lived in Jordan Township rather than in the city where most of the staff lived, and without exception, they all expressed the wish to continue on at Jordan High School for the foreseeable future. As a group they tended to be less committed to specialized subject skills than other teachers, but more committed to the school system itself than most of the staff. Gouldner divides the local teachers into four categories: the dedicated teachers, the true bureaucrats, the home guard, and the elders. Members of this group exhibited characteristics common to the category of dedicated locals. The dedicated locals are those teachers who tend to stress commitment to the institution rather than to the technical competence of their colleagues, and tend to form a loyal and reliable group. Most of this group clearly manifested some of these properties. Whereas other more cosmopolitan teachers on the staff felt free to analyze and criticize the operation of the school in some depth, the teachers in this group tended to provide a reliable source of moral support for the administration in all aspects of the school program. Members of this group were seldom directly involved in the introduction of any innovative practices, and frequently may have had personal misgivings concerning such programs, but they all felt obliged to support the administration loyally in whatever was being attempted.

The approach of members of this group to the introduction of the Jordan Plan provides a good example of the distinction between

cosmopolitan and local behavior. When questioned about their understanding about the objectives of the Jordan Plan, the responses of members of this group varied more widely than for any other group. The group split fairly evenly between those who tended to think the Plan was a teacher-oriented innovation, and those who thought the Plan was designed to be of primary benefit to the students. However, the apparent heterogeneity of this response was deceptive. While few of the group shared a common perception of the objectives of the Jordan Plan, they all shared a certain detachment from the Plan. None of this group had been among the group of teachers who had enthusiastically promoted the idea of a four day week in the previous year. Nor had they actively opposed the introduction of the innovation. For the most part they had been content to go along with the wish of the majority of the staff. One member of this group was quite frank and admitted, "I am great at tuning out certain things. I am only interested in what I want to be interested in. A lot of what goes on goes over my head because I am just not interested in it."

Most of this group expressed a philosophy of education somewhat more conservative than many of the younger group, but they were prepared to support the administration in any project it attempted. Only one member of this group ever took any active part in organizing or supervising part of the Wednesday activity program, but all members expressed mild support for whatever was going on. This group was the least involved and the least committed of all four groups with respect to the Jordan Plan.

On being questioned as to their opinion about various aspects

of the Plan, several members of the group expressed little knowledge about the way the Plan had developed. Only one teacher felt any obligation to participate at all actively. The Jordan Plan was not something that affected these teachers very deeply. Not only did they not participate in any of the Wednesday recreational activities, they also did less than the average amount of extra tuition, counselling, cooperative preparation and planning, and other extra-curricular activities on Wednesday. With the single exception of the teacher who helped conduct one of the Wednesday programs, the members of this group tended to devote Wednesday exclusively to their own individual planning and preparation.

The members of this group displayed the same sense of detachment and non-involvement when asked whether they wished the Plan to continue for the 1974-75 school year. Two members of the group expressed no preference either way, and the others expressed only mild support for the continuation of the Plan. The question did not appear to be one of any great consequence to this group. As experienced teachers, they had grown accustomed to periodic attempts to innovate within the system. They had also been teaching long enough to be aware of the low survival rate among educational innovations. When the Plan was first discussed among the staff in early 1973, these teachers had entertained lower expectations than most of the staff. Past experience had taught them to be sceptical of grandiose claims on behalf of innovative programs. These lower expectations had prepared them for what in fact had happened. They were not anticipating any great benefit to themselves from the Plan, and most of them

considered that the Plan, as it had developed, did not offer them very much. For most of this group, the four day week seemed to be only marginally better than the old five day week.

One member of the staff defied ready categorization in terms both of his personal attributes and relationships among the staff, and in terms of his attitudes towards, and involvement in, the Jordan Plan. According to most of the criteria, Shannon would fit into Group II, being a professional-oriented, highly educated subject specialist, situated towards the cosmopolitan end of the cosmopolitan-local continuum. However, he did not share the general opinion that the members of Group II had for the Jordan Plan and the way it had developed.

Rogers (1962) suggests that innovators frequently occupy an unusual position in the organization. They tend to be loners, attaching themselves to no single friendship or opinion grouping within the organization. They are also prepared to criticize and suggest alternative courses of action to the commonly accepted organizational practices. At the same time, successful innovators generally must occupy a position of some seniority within the organization in order that their ideas achieve any currency at all.

Shannon possessed many of these qualities. He was a subject coordinator, and widely recognized, even outside the school system, as being extremely competent within his subject specialty. Within the staff he occupied a somewhat unusual position. Universally accepted for his professional competence, he also possessed a highly critical, analytic concern for matters outside his discipline. A

few teachers sometimes found his probing, critical analyses a little disconcerting, and misinterpreted them as cynicism, sarcasm and iconoclasm. Shannon did not appear to belong to any particular group, though he appeared to have most in common with the high school teachers of Group II. It almost appeared that he rejected such membership as being excessively confining.

Much of the early development of the Jordan Plan was due to the work of Shannon. He first conceived of the possibility of a four day instructional week as a solution to the busing problem. The idea intrigued him and he began to examine it from every perspective. As the idea developed, new advantages and objectives began to suggest themselves. Shannon had a pragmatic awareness of the distinction between the innovation and the means by which the innovation should be introduced. He recognized that the innovation would have to be "sold" to each significant group within the overall system, and that each group would need to be given a slightly different perspective on the objectives, as well as the operation, of the four day week. What he may not have understood quite so well was that, according to McLuhan, the medium is the message, and that the way an innovation is "sold" to an individual will affect the way that individual views the innovation following its introduction.

From a personal point of view, Shannon had no difficulty making this adjustment. He was never totally committed to one objective for the Plan to the exclusion of any other. Although he stressed the advantages of the Plan for the teaching staff during the early months of 1973, he soon realized that the advantages to

the students would be just as important. He also realized the dissimilarity, and even contradiction, among some of these objectives, but was not personally concerned about this. As the Plan developed during the 1973-74 year, certain objectives of the Plan were clearly being met, while others were not. Shannon tended to adopt a pragmatic, balance sheet approach. As long as the positive features outweighed the negative features, he was not concerned that the objectives had changed from what they had originally been.

Summary

The purpose of the interview schedule was to uncover the relationship between meaning and action with respect to the Jordan Plan. In this chapter an attempt was made to identify groupings within the staff on the basis of distinct meaning-action patterns. The major criteria for the identification of each group were the teachers' perceptions of the objectives of the Plan. By categorizing the teachers according to their perceptions of the objectives of the Plan, it was possible to show a strong relationship between the way teachers perceived the Plan, and the way they reacted to it. Furthermore, their actions and perceptions with respect to the Plan seemed to be related to a number of other factors such as the length of teaching experience, the level of class they taught, their level of commitment to teaching, and the communication patterns within the staff.

CHAPTER 7

CONCLUSION

In attempting to draw together conclusions and implications from this study, two levels of analysis have been adopted. At the first level, it is important to analyze the study for what it shows about the process of innovation, and specifically, for what it shows about the implementation of the Jordan Plan. One of the major justifications for applying an action research/case study approach to the study of innovation was the pursuit of new grounded hypotheses about this process. This study has pointed to a number of inconsistencies in several assumptions about educational change which have enjoyed wide acceptance by social scientists. In exposing these inconsistencies, it also points to new hypotheses which may lead to more fruitful lines of research in the future.

The second level of analysis concerns the theoretical assumptions underlying the choice of research methodology for this study. The study largely forsook scientific empiricism in favor of an action research framework. An attempt was also made at the beginning of the study to suggest how an action framework was compatible with some of the more recent developments in modern social systems theory. It is important to study the extent to which the results of this study verify, or even justify, these theoretical and methodological assumptions.

Implications for the Study of
Educational Innovation

Most of the literature on educational change suggests that there is a definite series of steps through which a system passes as it attempts to introduce an innovation. The first step is normally an awareness of a problem or deficiency in the operation of the system. Either the system is not achieving its goals, or the goals themselves seem no longer appropriate for the system. The identification of the problem then leads to the search for a solution. Information and other resources helpful to making this decision are gathered. At the third stage, a choice is made from among the available alternatives. Finally, the innovation is introduced into the system.

This model is so basic, and so frequently uttered, that we rarely question the universality of its application. How else could an innovation come about? It may be, however, that educational innovations do not always happen this way. In fact, this is a deceptively simple model for an extremely complex process, and innovations may rarely happen this way. To accept the model in the first instance is also to accept, even if only implicitly, a simple systems view of organizations. This view of systems assumes that each system has a coherent set of objectives, that these objectives are shared by all members of the system, and that the system is somehow capable of correcting its behavior to match these objectives.

The introduction of the Jordan Plan illustrates the dangerous simplicity of the model. The introduction of the Plan did not follow the sequence of steps suggested by the model. The idea of a four day

instructional week did not come about as the result of an organized search for a solution to a well articulated problem. The idea of a four day instructional week first attracted the attention of the teachers because it seemed to offer some relief from the financial burden of the school busing program. This problem was not something new--it was a longstanding, chronic condition of the system for which nobody was seriously looking for a solution. By the time it was realized that a four day week would not provide any solution to the busing problem, other problems within the system had been located for which the compressed week seemed to offer a solution. The objectives of the Plan shifted correspondingly to match these new problems. As new problems substituted for old problems, new goals and objectives substituted for old goals and objectives. This process of goal substitution and goal proliferation continued throughout the development of the Jordan Plan.

Owing to this sequence of events, these objectives might almost be thought of as "selling points" for the Plan rather than as genuine objectives. This is not necessarily a criticism of the Jordan Plan or the way in which it was implemented. A close examination of the implementation of many educational innovations would probably reveal a similar sequence. The pluralistic nature of today's educational decision-making process may even, at times, necessitate the reversal of the conventional sequence. The problem of winning the support of all significant groups in a system for a single, potentially controversial innovation, may make it impossible to avoid this process of goal substitution and goal proliferation. It is

certainly arguable that if the Jordan Plan had been presented in an identical manner to each group, it might not have won even initial acceptance. However, it would appear that this sequence of events did tend to generate a number of complicating tendencies within the system. From an analysis of these tendencies it is possible to arrive at a number of working hypotheses which might serve as the basis for future research in the area of educational innovation.

Hypothesis I. Where the idea for an innovation is conceived before the need for the innovation is clearly identified, there is a tendency for the number of objectives and selling points to multiply.

The teachers were asked what they understood the objectives of the Jordan Plan to be. Their answers, when edited and compressed, fell into ten distinct categories:

1. To provide a more even balance between academic education and cultural, sporting and recreational experience.
2. To enable the teachers to make more effective use of their time by rationalizing the school week.
3. To enable the students to make more effective use of their time by rationalizing the school week.
4. To increase administrative convenience and economy.
5. To reduce the problem of supervision of students.
6. To promote the involvement of the community with the school.
7. To foster the development of a better relationship between staff and students.
8. To promote a distinct school identity, and to increase the level of school pride.
9. To increase the pressure on students within the academic program.
10. To enable teachers to work a more relaxed and more enjoyable four day week.

There was an amazing lack of agreement among the staff even as to the most important objective of the Plan. For example, there was a definite division among the staff between those who thought the four day week was a "teachers' plan," designed for the convenience of the teachers, and those who thought that the Plan was designed with the students in mind.

This kind of situation is probably not uncommon in educational systems. Matthew Miles (1967) has suggested that two distinctive features of educational systems are the vagueness and generality of their goals and objectives, and secondly, the extreme difficulty of evaluating the performance of educational systems against these stated objectives. In this kind of situation, members of a school system will always be able to identify certain educational objectives which are not being fully met. Conversely, almost any proposal for educational change may be justified by reference to one or more of a large number of available objectives. In such a situation, where the links between the objectives of a system, the actions of a system, and the evaluation of these actions are so tenuous, there may be a real tendency to select the innovation first, and only subsequently to describe the objectives it is supposed to serve.

Hypothesis II. Where there is a proliferation of objectives there is increased likelihood that some of these objectives may be mutually incompatible.

Two of the objectives which the Superintendent claimed for the Plan during the summer of 1973 were to enable field trips to be scheduled on Wednesday, and to establish a program of recreational

activities on Wednesday. Only a few teachers foresaw the inherent contradiction. The success of the Wednesday program of activities made it almost impossible to schedule field trips on Wednesday. In fact, there were fewer field trips conducted during the 1973-74 school year than during the previous year. This was a clear example of two objectives, both quite acceptable in themselves, which were incompatible when applied to the same innovation.

Another example was the confusion concerning the principal orientation of the Plan. The Plan was apparently expected to benefit both the teachers and the students. In fact, few teachers saw these two objectives as being wholly compatible. In the opinion of most teachers, the fulfillment of one objective entailed the neglect of the other.

Hypothesis III. Where there is a proliferation of objectives, it becomes increasingly difficult to establish any set of priorities among these objectives. It becomes increasingly difficult to evaluate the scheme because it is not always apparent which are the dominant objectives.

At no time during the 1973-74 school year was there any attempt to rank the objectives of the Plan according to any set of priorities. Such a task would have been both difficult and potentially dangerous for the survival of the Plan. Since the identification of the objectives followed the conceptualization of the form of the innovation, these objectives could almost be thought of as advantages rather than goals. That is, as more members of the system considered the idea of a compressed teaching week, more advantages were perceived

for it. Each individual had his own implicit ranking of these objectives. Some objectives were clearly more important than others. However, there was little agreement among different individuals as to which objective was the most important. Any attempt by the administration to apply a priority system to the objectives would probably have alienated those teachers who perceived their objectives for the Plan being given a low priority.

Hypothesis IV. Where there is a proliferation of objectives, there is a tendency for individuals to view the innovation in terms of their own perception of the objectives.

This statement is a direct application of the symbolic interactionist premise that individuals act towards objects on the basis of the meaning that these objects hold for them. Social reality is truly subjective. For example, when the Plan was first presented to the staff, most of the objectives centred on the advantages the teachers would gain from a reorganization of the work week. At a later date much of the emphasis shifted to the objectives of the Wednesday activity program and community involvement. Many teachers were genuinely surprised to discover the importance given to the Wednesday activity program when they returned to school in September, 1973. Later in the year, almost half the staff felt that the Plan had not developed in the way they had been led to expect in March and April of 1973.

Similarly, there was a small group of teachers (Group II) for whom the objectives of community involvement and recreational activity for the students were dominant. Members of this group fully

approved of the Wednesday program, and tended to give a lot of their own free time to help run the program. They found it difficult to understand why other teachers were not always fully supportive of the program, and did not help to run some of the courses.

The following is a development that seems to illustrate all four hypotheses. Just prior to the end of the 1973-74 school year, the School Board met to come to a decision on the future of the Jordan Plan. They had delayed making their decision until they had heard from a parent group which had been specially appointed to investigate parental attitudes to the Plan. The group was able to report a generally favorable reaction from the parent body towards the innovation. Most parents had indicated support for the Plan as it had developed. However, several qualifications and recommendations were made. The group detected the absence of any overriding purpose for the Plan. They felt there had been some lack of direction in the organization of the Jordan Plan activities, that the Plan had not been fully integrated into the general school program, and that many teachers seemed to have very little interest or participation in these activities. They also expressed concern at the drop in student registrations, and suggested that some minimal degree of participation should be compulsory, at least for the junior high school students. These concerns tended to reflect the major objectives that the parents held for the Jordan Plan. For them, the Wednesday activities seemed to be the most important and valuable feature of the Plan, and all their recommendations focused on the problems of making this program operate more effectively. These were all eminently

reasonable suggestions. However, they ran contrary to the objectives that many of the teachers held for the Jordan Plan.

The Wednesday activity program was created on the principle of voluntary participation by both teachers and students. Any attempt to compel students to attend these activities would have breached this principle, and would have been of dubious legality. More importantly, such a move would have exposed the wide gap between the objectives held for the Plan by the teachers, and the objectives held for the Plan by the parents. The majority of teachers had no wish to be more closely associated with the Jordan Plan activity program than they were already. They considered the activity program to be of probable benefit to the students, but they did not consider it to be the teachers' responsibility to supervise or operate the program. An important selling point for the Plan had been that teachers had been assured that they would not be required to supervise any student activities on Wednesday. The chief benefit they derived from the compressed teaching week was the uncommitted time on Wednesday to devote to their own planning and preparation. Any attempt to force students to participate in a Wednesday program of activities would almost certainly have led to a supervision problem on Wednesday. This in turn would probably have necessitated the teachers taking some kind of supervisory role on Wednesday. This would have seriously reduced any advantage of the compressed week for the teachers.

For most of the teachers, the voluntary nature of the Wednesday activity program was one of the most positive features of the Jordan Plan. Wednesday was not merely a day that could be scheduled for

different kinds of activities, but an opportunity for teachers and students alike to pursue their own interests outside the confinement of a timetable. For the Principal, the voluntary nature of the Plan was the single most important aspect of the whole innovation. To remove this voluntary aspect would, in his opinion, have done away with the most worthwhile and distinctive quality of the Jordan Plan, and reduced it to just another alteration of the school timetable.

It is worthwhile to ask how it was possible for so many individuals and groups, both inside and outside the system, to have continued to hold such diverse perceptions of the Jordan Plan for an entire school year. A premise of the consensus model of exchange theory is that people come to share a common orientation towards reality through communication (Buckley, 1967:82-127), and that, broadly speaking, the more two individuals communicate together, the more likely it is that they will come to share a common orientation. It seems likely that the distinctive development of the Jordan Plan owed more to the nature of the communication between individuals and groups than to any other process. Attention might be focused on at least three areas of communication.

1. Communication within the staff.

The wide differences of opinion concerning the objectives held by the teachers concerning the Jordan Plan have been discussed earlier. A very low level of communication among the staff on the subject of the Jordan Plan can be seen as a probable reason for these wide differences of opinion. During the 1973-74 school year, there were no extended discussions of the Jordan Plan by the

staff as a whole. Occasionally some aspect of the Plan might be discussed briefly during a staff meeting, but no attempt was made to encourage any more intensive discussion. After the first month or two of operation, there was only occasional mention made of the Plan even in casual conversation among teachers. Under these conditions, it was almost inevitable that wide differences of opinion should have developed concerning the Plan.

The data from the interview schedule also seemed to suggest that teachers who shared common opinions about various aspects of school life tended to share similar perceptions of the Jordan Plan. In the main, teachers sharing common perceptions tended to fall into the same broad social groupings, and therefore communicated more with each other.

2. Communication between the school staff, the Jordan Plan Coordinator, and the school administration.

During the year there was very little direct communication between the members of the school staff and the Coordinator of the Jordan Plan activity program. The relationship between the Coordinator and the staff was touched on in an earlier chapter at the beginning of the school year, some of the senior school staff were somewhat disconcerted that the Coordinator had not sought their advice and guidance on the creation of the Wednesday activity program. While this initial coolness in the relationship between the teachers and the Coordinator did not persist, it did establish a pattern of limited communications. In November 1973 a newly graduated high school student was taken on as assistant to the Coordinator. Early

in the new year the Coordinator began to spend less time at the school, and from the end of March, the assistant took over as acting Coordinator. During the interviews, most of the staff indicated they had not even had occasion to speak to the new Coordinator, in spite of the fact that he had been at the school for almost six months. Lacking this communication, the Coordinator had no way of knowing that the Jordan Plan was ever intended to be any more than a recreational program.

The role relationship between the Coordinator and the Principal was never completely resolved, and this tended to have an impact on the level of communication between the two individuals. Officially, the Coordinator was to be directly responsible to the Principal, but, in fact, most important decisions affecting the Plan were made by the Coordinator and the Superintendent. This lack of communication tended to broaden the gap between the regular school program and the Jordan Plan, and between the staff and the Coordinator.

3. Communication between teachers, students, parents and Jordan Plan instructors.

During the year these four groups had very few opportunities to communicate directly with one another on the subject of the Jordan Plan. Communication between the groups was mostly vertical, through the Superintendent and the School Board. It seems likely that this type of communication may have tended to preserve, and even to foster, the multiplicity of varying objectives and perceptions of the Plan. Had these groups had more opportunity to share each others' points of view, it seems unlikely that the wide variety of conflicting

opinions would have persisted as long as it did.

It is not possible to do more than speculate on what would have happened had the level of communication between these groups been higher. Conventional sociological wisdom might suggest that a better level of communication might have tended to harmonize the conflicting perceptions that each group had of the Plan. If the teachers had been consulted fully during the early development of the Plan in September and October of 1973, some agreement might have been reached concerning the primary objectives of the innovation. Had the teachers had more contact with the parents and the Jordan Plan instructors, all parties might have gained a better idea of each others' point of view. This might have led to a greater degree of mutual understanding and empathy. Much of the illfeeling among staff members and parents might have been avoided had there been more frequent and open discussions throughout the year.

On the other hand, it seems just as likely that a higher level of communication might have destroyed the Jordan Plan well before the end of the 1973-74 school year. It might be argued that the low level of communication among various members of the system and suprasystem was actually responsible for the survival of the Plan.

It has been shown that individuals and groups in the system entertained different perceptions of the objectives of the Jordan Plan. It is also true that, for the most part, individuals were not aware of the diversity of opinion concerning the objectives of the Plan. This state of affairs was made possible at least partly

because of the low level of communication within the system, and between the system and the suprasystem. Individuals were only rarely confronted by individuals who expressed different and even contradictory perceptions to their own. In the main, individuals espoused objectives for the Plan that coincided most closely with their own attitudes and philosophy of education. They tended also to respond towards the Jordan Plan in terms of their perceptions of the objectives of the Plan. That is, teachers who perceived the major objective of the Plan as being student-oriented tended to become deeply involved in providing activities for students on Wednesday. Teachers who believed that the major objective of the Plan was to assist the teacher tended to avoid this kind of involvement.

As long as this great variety of objectives, and perceptions of objectives, was tolerated, then it was not necessary for individuals holding different opinions to come into open conflict. It was also not necessary for anyone to modify their perception of the objectives to conform to any official position. If however there had been fuller and more open communication between all groups from the earliest days of the innovation, then the basic incompatibility of some of the objectives might have been more apparent, and support for the Plan would have been reduced accordingly. It may be that the Jordan Plan could only find general acceptance within the system by virtue of the fact that each group viewed the Plan differently, and in accordance with its own best interests. As long as the members of each group were not forced to change their opinions or their behavior, they were prepared to accede to the Plan.

This may have broader implications for the study of educational innovations. It is probably unrealistic to expect all members of a school system to share an identical set of goals for education. It is probably equally unrealistic to expect full support from all members of the system for all the activities that take place within the system. This would appear to preclude most innovations which require a uniform change of attitude and behavior of each system members. However, it may be possible to introduce farreaching innovations which do not involve every system member. In the case of the Jordan Plan, only a few teachers became directly involved in the Wednesday program component of the Plan, but the program was nonetheless viable. In the case of other curriculum reform attempts, it may frequently be better to allow laggard and opposing teachers to retain their old practices, rather than risk the success of the whole project by forcing them to conform in attitude and practice to the new reform.

Implications for Research Methodology

The advantages of an action mode of research over any other kind of research tradition cannot be proven--they can only be demonstrated.

This study began with an exploration of the sociological explanations of educational change. It was shown that studies of single variables, and groups of variables, are generally based on an inadequate theoretical explanation of social change. Systems theory, it was suggested, offers the most comprehensive approach, and therefore, potentially, the most productive avenue for study. However, an

analysis of the systems models currently used by most social theorists revealed a singular weakness in the area of the explanation of social change. These models borrow from the mechanistic and organismic systems models of the physical and natural sciences respectively. Accordingly, their explanations of the nature of social and organizational change owe more to the laws of thermodynamics and bioevolutionary processes than they do to the true nature of social systems.

It was suggested that there was a need to develop a model which more accurately reflects the complex interplay of activity that takes place within and between social systems. William F. Buckley has made considerable progress in describing the outlines of such a system. His Complex Adaptive Systems Model is based on the meanings, the actions and the interactions of individual system members. Buckley abandons the concept of system equilibrium, or even system evolution, in favor of a state of constant generation, elaboration, and restructuring of patterns within the system. All system processes can be traced back to the individual, and the way he perceives and interacts with the world outside himself.

As the result of attempting to analyze the real nature of social systems, Buckley believes that the only way to understand them intelligently is to conceive of them as groups of acting rather than behaving individuals. He suggests that the more complicated system processes are based on the subjectively based perceptions and actions of individual system members. To understand the former, one has to begin with a detailed study of the latter. On the basis of these understandings, Buckley proposes that an action framework

is the most appropriate research tradition from which to approach the study of organizations.

This study was an attempt to apply an action analysis to the study of an organizational process along the lines Buckley suggests. It is clear that the action framework does address itself to the phenomena in a different manner from the conventional empirical research perspective. It is equally clear that the action framework is a potent method for generating new hypotheses about organizational processes which are firmly grounded in social reality. What is perhaps not so clear is the degree to which the study has succeeded in integrating a systems approach with an action framework. The justification for making the attempt to integrate the two was presented earlier. The question remains whether in fact the two approaches are compatible.

Conventional sociological wisdom has long maintained that the two approaches--systems theory and action research--are either incompatible frames of reference, or at best, at opposite ends of a continuum of scale. That is, while systems theory is said to concern itself with large social collectivities, action theory is said to be more concerned with the actions of individuals. Silverman (1970) certainly views this dualism of action theory and systems theory in this light. "Systems theory" as he understands the term has tended to warp the sociologist's view of organizational process by an inherent inability to recognize the importance of individual system members and their actions. He suggests that organizational theorists should turn to action research as a more plausible alternative to systems theory.

It would appear from this study that the only major differences

between the positions of Silverman and Buckley are the points from which they would start their sociological analysis, and the terminology they use. In his analysis of the properties of complex adaptive systems, Buckley rejects the same features of conventional systems theory that Silverman finds so unacceptable. However, instead of rejecting the systems approach altogether, Buckley attempts to rewrite the basic principles of such an approach.

Silverman starts from an analysis of the individual acting organism, hoping eventually to arrive at large scale principles of organizational process by comparisons of these kinds of study. Buckley begins with certain assumptions about organizational process, but goes back to the same source as Silverman for the data to confirm and extend these assumptions.

It has not been the intent of this study to provide a complete description of a social system and its operations through the medium of action research. At this stage it is somewhat difficult to even conceive what such a study would be like. And to achieve this would solve at one stroke what is probably the most obstinate and tortuous conundrum of modern sociological and organizational research. What it has been is an attempt to demonstrate that systems theory and action theory need not remain incompatible frames of reference. It could be argued that in attempting to do this, the operational definition of systems theory has been diluted to the point where it is scarcely meaningful to speak of system properties as distinct from individual actions. While there is some support for this assertion, it should not be allowed to prejudice this type of research

effort. Buckley has demonstrated, albeit only theoretically, that systems theory and action theory are compatible. This assertion has momentous implications for the direction of sociological inquiry, and in the long term, for the kinds of explanations that organizational theorists arrive at for the actions of social systems. This study has been no more than an attempt to carry out this kind of action research within the broad assumptions of Buckley's Complex Adaptive Systems Model.

Implications for Further Research
in the Process of Educational
Innovation

The study leads to two sets of implications for research in the area of educational innovation. Firstly, there are a number of studies arising directly from the hypotheses that have been generated. These would involve testing the hypotheses concerning the generation of objectives for innovations. Probably more fruitful than this particularistic approach would be a more general one.

The results of this study appear to support some recent theoretical propositions of R.E. Klitgaard (1973). Klitgaard suggests that there are two competing models that may be used to explain the process of educational innovation. He calls these models the Naive Hypothesis and the Organizational Hypothesis. The Naive Hypothesis is the one into which most current research falls. It assumes firstly that schools exist primarily because people are willing to have their children socialized in certain ways. It assumes that the parents, via the political process, ultimately decide which educational goals will be pursued in the schools, and also decide

the appropriate "production strategy" with which to fulfill these community goals. Evaluation becomes a process of measuring the extent to which the production strategies are effective in fulfilling the basic community goals.

The Organizational Hypothesis suggests that the original rationale for public education no longer matters. The most important fact to consider is that schools exist. Rationality plays only a small part in determining the policies of public schools. Bureaucratic factors tend to be more influential than the rational factors stressed by the Naive Hypothesis. According to the Organizational Hypothesis, the goals of public education are in some sense indefinable. Therefore, the standard procedure of identifying the objectives of an innovation, and then proceeding to evaluate the innovation in terms of these objectives, may be inappropriate. This model would suggest that much of what goes on in schools cannot be properly identified as being an expression of any coherent school goal.

The need for change in our educational institutions is widely recognized, but the two models differ on the courses of action they recommend. The Naive Hypothesis urges the researcher to identify the policies and procedures of schools that consistently affect student outcomes. These can then be modified to promote a particular type of production. The high rate of failure among these innovations arises, Klitgaard suggests, because of the built-in failure to coordinate the goals, the implementation, and the production strategies associated with the innovations. The Organizational Hypothesis suggests that it is a mistake to assume that every

innovation will have, or even should have, a readily identifiable educational goal. Instead, innovation should be encouraged in order to develop a capacity in schools to adapt to changing social needs.

As with many dichotomous models, Klitgaard has presented two extreme views of the innovation process. The researcher is not obliged to accept either model to the total exclusion of the other. At the same time, Klitgaard does seem to have identified a crucial problem area in the analysis of educational innovations. This study made no attempt to evaluate the Jordan Plan--mainly because the impossibility of the task was foreseen at the beginning of the school year. However, members of the system and suprasystem, such as the Principal, the Superintendent, the School Board, the Department of Culture, Youth and Recreation, the parents, the Department of Education and The Alberta Teachers' Association all wanted some form of evaluation. Opinion differed depending on the predominant goals each identified for the Plan, and the method of evaluation chosen by each.

This study would support Klitgaard's suggestion that a new orientation is needed for research in the area of educational innovation. Research in the "old style" takes an innovation and investigates whether it works. Klitgaard maintains that research should be focused on the process of innovation. Any complete explanation of an innovation should include all four elements of the process: the objectives, the implementation process, the production possibilities and the evaluation process. The present study would appear to satisfy this requirement and, in doing so, seems to support

Klitgaard's emphasis away from the Naive Hypothesis. The acceptance of an explanatory model somewhat closer to the Organizational Hypothesis has enormous implications for the process of educational innovation. The findings of this study provide some evidence to support Klitgaard's proposition. There is clearly a need for more studies of this type to determine whether a major shift in the orientation of our approach to educational innovation is justified.

Implications for Educational Administrators

Several of the hypotheses and research problems that have been highlighted in this concluding chapter may have important implications for practicing administrators. The findings of the study are by no means conclusive and until they have been verified the implications must remain tentative.

Much of the study has been concerned with the exploration of consensus among the staff of the Jordan High School. Educational administrators have tended to assume that consensus on objectives and practice is the normal state for the staff of a school and that all lapses from this state are somehow deviant. Great amounts of time and energy have been spent in the attempt to induce members of school systems to conform to this state of "normality". The results of this study raise the possibility that much of this effort to weld a consensus within school systems may be misguided and counterproductive. If other schools in any way resemble Jordan High, there will be many important areas of school objectives and practice in which there is no consensus among the staff.

One lesson that could be drawn from this study is that it may be more practical not to push for consensus on every issue. In a complex adaptive social system, such as a school, consensus cannot be expected on every issue. To attempt to force such a consensus is likely to result in one or more of a number of negative developments. One result of such an attempt would be for the school program to become so unexceptional and bland that no staff member could reasonably object to any aspect of it. Another possible development would be for the staff to become alienated from the whole program by the attempt to force a consensus in just one area.

This study would tend to suggest that consensus is not a prerequisite of viable educational innovation. Conversely, many innovations would never take place if administrators waited for a full consensus before proceeding.

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APPENDIX A
STUDENT QUESTIONNAIRE #1

Questionnaire Form

Report of Results

QUESTIONNAIRE

PLEASE ANSWER THE FOLLOWING QUESTIONS. IF YOU DO NOT UNDERSTAND A QUESTION, ASK YOUR TEACHER TO EXPLAIN IT. PRINT CLEARLY

1. NAME

Last

First

2. SEX (Put an (X) in the box.

(1)	(2)
H	F

3. GRADE:

7	8	9	10	11	12
---	---	---	----	----	----

4. How many Wednesday JORDAN PLAN activities are you registered in at this time?

0	1	2	3	4	5
---	---	---	---	---	---

5. List the activities in which you are registered and write the course numbers in the boxes.

1.	
2.	
3.	
4.	
5.	

The next few questions are designed to find out how you are spending your time on Wednesdays during registered school hours. 9 A.M. to 3:30 P.M.

THINK ABOUT LAST WEDNESDAY, SEPTEMBER 26th

6. How many hours did you spend in JORDAN PLAN ACTIVITIES?

0	1	2	3	4	5	6
---	---	---	---	---	---	---

7. How many hours did you spend at school altogether counting lunchtime, JORDAN PLAN ACTIVITIES and waiting time?

0	1	2	3	4	5	6
---	---	---	---	---	---	---

8. How many hours did you spend at home between 9 A.M. and 3 P.M.?

0	1	2	3	4	5	6
---	---	---	---	---	---	---

9. How many hours did you spend in work directly relating to classwork requirements either at home or school? e.g. finishing assignments

0	1	2	3	4	5	6
---	---	---	---	---	---	---

10. How many hours did you spend in non-school activities which you consider to be worth-while and educational, but which you were not made to do by your teachers? e.g. sports reading, private study etc.

0	1	2	3	4	5	6
---	---	---	---	---	---	---

11. How many hours did you spend in activities which were enjoyable rather than educational? e.g. going into the city, shopping, movies, T.V., with friends, goofing off, etc.

0	1	2	3	4	5	6
---	---	---	---	---	---	---

12. Is there an adult at home during school hours?

(1)	(2)
Yes	No

13. Do you prefer the JORDAN PLAN ACTIVITIES to the old 5 day school week?

(1)	(2)
Yes	No

IF YOU HAVE ANY COMMENTS TO MAKE ABOUT THE WAY THE JORDAN PLAN IS BEING RUN, PLEASE WRITE THEM ON THE BACK OF THIS QUESTIONNAIRE.

1 - 20

21

22, 23

24

25, 26

27, 28

29, 30

31, 32

33, 34

35

36

37

38

39

40

41

42

Page 1

ANALYSIS: INTERPRETATION OF DATA FROM QUESTIONNAIRE ADMINISTERED TO
634 STUDENTS AT HIGH SCHOOL FRIDAY, SEPTEMBER
28th, 1973.

T. K. PREBBLE

PURPOSE: 1. to determine the extent of student interest and participation in the Jordan Plan.
2. to determine how students spend their time on Wednesdays during normal school hours.

METHOD OF TREATMENT:

Data from the 634 questionnaires punched onto cards and processed by the University of Alberta Computing Services using program DERS: NONP 10 and sub routines of that program.

SIMPLE FREQUENCY TREATMENT OF DATA:

1.	SEX					
	MALE			FEMALE		
	328			306		
	51.7			48.3		
Total %				634		
				100.0		
2.	GRADE LEVEL					
	7	8	9	10	11	12
	161	131	108	94	73	67
Total %	25.4	20.7	17.0	14.8	11.5	10.6
	634					
	100.0					
3.	NUMBER OF STUDENTS TAKING 0,1,2,3,4, JORDAN PLAN ACTIVITIES					
	0	1	2	3	4	
	143	239	180	63	9	634
Total %	22.6	37.7	28.4	9.9	1.4	100.0
4.	NUMBER OF STUDENTS REGISTERED IN EACH CLASS (See attached sheet)					
5.	HOURS SPENT IN JORDAN PLAN ACTIVITIES					
	0	1	2	3	4	5
	164	78	172	112	71	25
Total %	25.9	12.3	27.1	17.7	11.2	3.9
	100.0					
6.	HOURS SPENT AT HOME BETWEEN 9AM and 6PM					
	0	1	2	3	4	5
	193	92	90	108	72	16
Total %	30.4	14.5	14.2	17.0	11.4	2.5
	9.9					
	100.0					

7. HOURS SPENT IN STUDY DIRECTLY RELATED TO SCHOOL ASSIGNMENTS

	0	1	2	3	4	5	6	
	328	194	75	28	4	2	3	634
Total %	51.7	30.6	11.8	4.4	0.6	0.3	0.5	100.0

8. QUESTION: IS THERE AN ADULT AT HOME DURING SCHOOL HOURS?

	YES	NO	
	486	148	634
Total %	76.7	23.3	100.0

9. QUESTION: DO YOU PREFER THE JORDAN PLAN ACTIVITIES TO THE OLD 5 DAY SCHOOL WEEK?

	YES	NO	
	593	41	634
Total %	93.5	6.5	100.0

Further analysis of the data revealed a number of facts.

- a) There is little significant difference in participation in the Jordan Plan Activities on the basis of sex.
- b) A significantly higher proportion of boys than girls report that they engaged in no study directly relating to school assignments on Wednesday (196:132)
- c) A significantly higher proportion of students at the Junior High level than at the Senior High level are registered in 1 or more Jordan Plan Activity.

PERCENTAGE OF STUDENTS AT EACH GRADE LEVEL REGISTERED IN 0,1,2,3,4, COURSES (% BY ROWS)

	0	1	2	3	4	No. of Courses
7	8.1	41.0	36.6	11.8	2.5	25.4
8	22.1	35.9	32.8	7.6	1.5	20.7
9	23.1	36.1	28.7	11.1	0.9	17.0
10	22.3	40.4	27.7	8.5	1.1	14.8
11	23.3	42.5	23.3	9.6	1.4	11.5
12	56.7	26.9	6.0	10.4	0.0	10.6

- d) There is little significant difference between the amounts of time spent at home on Wednesdays by students from different grades.

APPENDIX B

JORDAN PLAN INSTRUCTOR QUESTIONNAIRE

Questionnaire Form

QUESTION FORM FOR JORDAN PLAN INSTRUCTORS

September 27th, 1973

1. NAME _____
 LAST FIRST
2. NAME OF COURSE(S) _____
3. TIME OF COURSE(S) _____
4. LOCATION OF COURSE(S) _____
5. DURATION OF COURSE(S) _____
6. NUMBER OF STUDENTS REGISTERED _____
7. ACTUAL ATTENDANCE ON WEDNESDAY, SEPTEMBER 26th
(Approximate figure if exact number unknown)
8. WRITE YOUR IMPRESSIONS OF THE FIRST 3 WEEKS OF YOUR
COURSE. ARE YOU HAVING ANY PROBLEMS? DO YOU REQUIRE
ANY HELP? ARE THE PHYSICAL FACILITIES ADEQUATE? HOW
ARE THE STUDENTS REACTING? WHAT IS YOUR OVERALL IMPRESSION
OF THE JORDAN PLAN?

APPENDIX C
STUDENT QUESTIONNAIRE #2

Questionnaire Form
Report of Results

- | | | | |
|--|-----------------------------|----------------|--------|
| 12. Who usually pays the fees for your Wednesday Jordan Plan activities? | Parents | 1. <u> </u> | |
| | Self | 2. <u> </u> | |
| | Share cost (parents & self) | 3. <u> </u> | 13 |
| | Not applicable | 4. <u> </u> | |
| 13. Have you been prevented from taking any of the courses because of the expense? | Yes | 1. <u> </u> | |
| | No | 2. <u> </u> | 14 |
| State which courses | | | 15 |
| 14. Do you prefer the four day week and the Wednesday activities to the normal five day school week? | Yes | 1. <u> </u> | |
| | Undecided | 2. <u> </u> | 16 |
| | No | 3. <u> </u> | |
| 15. Are there any aspects of the four day week and the Wednesday activities which you think should be changed or improved? What sort of changes would you suggest? | | | |
| | | | 17, 18 |
| | | | 19, 20 |
| | | | |

The remaining questions should be answered by students from Grades 8,9,10,11 and 12 only. Students from Grade 7 should not answer them.

When comparing this school year (1973-4) with last school year (1972-3), do you find any differences in ...

- | | | | |
|--|----------------------|----------------|----|
| 16. ... how tired you get by the end of the school day? | More tired this year | 1. <u> </u> | |
| | No change | 2. <u> </u> | 21 |
| | Less tired this year | 3. <u> </u> | |
| 17. ... the amount of homework you complete in a week? | More this year | 1. <u> </u> | |
| | No change | 2. <u> </u> | 22 |
| | Less this year | 3. <u> </u> | |
| 18. ... the amount of individual tutoring and help you have received from teachers? | More this year | 1. <u> </u> | |
| | No change | 2. <u> </u> | 23 |
| | Less this year | 3. <u> </u> | |
| 19. ... the number of field trips you have been on? (not counting Wednesday courses) | More this year | 1. <u> </u> | |
| | No change | 2. <u> </u> | 24 |
| | Fewer this year | 3. <u> </u> | |
| 20. ... the level of school spirit and school pride? | Better this year | 1. <u> </u> | |
| | No change | 2. <u> </u> | 25 |
| | Worse this year | 3. <u> </u> | |

COMMENTS

INTERPRETATION OF DATA FROM QUESTIONNAIRE ADMINISTERED TO
595 STUDENTS AT HIGH SCHOOL FRIDAY, MARCH 8/74.

T. K. Prebble

PURPOSE:

to determine the extent of student interest and participation in the Jordan Plan.
to determine how students spend their time on Wednesdays during normal school hours.
to determine how students perceive the general level of interest in the Jordan Plan.

SIMPLE FREQUENCY TREATMENT OF DATA

1.	Sex	Male	Female						
		319	276					595	
	Total%	53.6	46.4					100	
2.	Grade	7	8	9	10	11	12		
		150	131	84	102	75	53	595	
	Total%	25.2	22.0	14.1	17.1	12.6	8.9	100	
3.	Number of students taking 0, 1, 2, 3 Jordan Plan Activities.	0	1	2	3				
		201	276	94	27			595	
	Total%	33.8	46.4	15.3	4.5			100	
4.	Hours spent in Jordan Plan activities.	0	1	2	3	4	5	6	
		210	24	114	108	74	40	25	595
	Total%	35.3	4.0	19.2	18.2	12.4	6.7	4.2	100
5.	Hours spent at home.	0	1	2	3	4	5	6	
		187	68	81	104	49	17	89	595
	Total %	31.4	11.4	13.6	17.5	8.2	2.9	15.0	100
6.	Hours spent at a paid or voluntary job.	0	1	2	3	4	5	6	
		439	52	35	21	17	7	24	595
	Total%	73.8	8.7	5.9	3.5	2.9	1.2	4.0	100
7.	Hours spent doing schoolwork or private study.	0	1	2	3	4	5	6	
		205	221	96	45	15	10	3	595
	Total%	34.5	37.7	16.1	7.6	2.5	1.7	0.5	100
8.	How would you describe your father's attitude to the Jordan Plan?	Favorable	Undecided	Unfavorable					
		383	160	52				595	
	Total%	64.4	26.9	8.7				100	
9.	How would you describe your mother's attitude to the Jordan Plan?	Favorable	Undecided	Unfavorable					
		408	115	72				595	
	Total%	68.6	19.3	12.1				100	
10.	If you have a brother or sister attending elementary school, what is their attitude to the Jordan Plan?	Favorable	N/A	Undecided	Unfavorable				
		330	175	80	10			595	
	Total%	55.5	29.4	13.4	1.7			100	

11. In your opinion, what proportion of students at this school prefer the four day week and Jordan Plan activities to the normal five day school week?					
0 - 20%	20-40%	40-60%	60-80%	80-100%	
10	10	61	193	321	595
Total	1.7	1.7	10.3	32.4	53.9
					100
12. Who usually pays the fees for your Wednesday Jordan Plan activities?					
Parents	Self	Share	N/A		
282	88	119	106		595
Total	47.4	14.8	20.0	17.8	100
13. Have you been prevented from taking any of the courses because of the expense?					
Yes	No				
173	422				595
Total	29.1	70.9			100
14. Do you prefer the four day week and the Wednesday Jordan Plan activities to the normal five day school week?					
Yes	Undecided	No			
505	53	36			595
Total	85.0	8.9	6.1		100
The remaining questions were answered only by grades 8, 9, 10, 11 and 12:					
When comparing this school year(73-74) with last(72-73) do you find differences in					
16. how tired you get by the end of the day?					
	More tired	No change	Less tired		
	107	256	82		445
Total %	24.0	57.5	18.4		100
17. the amount of homework you complete in a week?					
	More	No change	Less		
	221	179	45		445
Total %	49.7	40.2	10.1		100
18. the amount of tutoring and individual help you have received from teachers?					
	More	No change	Less		
	142	260	43		445
Total %	31.9	58.4	9.7		100
19. the number of field trips you have been on?					
	(not counting Wednesday courses)				
	More	No change	Fewer		
	22	194	229		445
Total %	4.9	43.6	51.5		100
20. the level of school pride and school spirit?					
	Better	No change	Worse		
	240	157	48		445
Total %	53.9	35.3	10.8		100

Further analysis of the data revealed a number of trends:

1. There is a significant difference between the participation of boys and girls in the Jordan Plan activities. While the proportion taking just one course is equal (46.4%), a greater proportion of boys take more than one course and a greater proportion of girls take no courses at all.

2. There is a general tendency for participation in Jordan Plan activities to drop off in the higher grades.

Percentage of each grade level registered in no activities.

7	8	9	10	11	12
18.7	32.1	23.8	32.8	50.7	75.5

3. Nearly 10% of students in grades 11 and 12 report spending all day (6 or more hours) at a paid or voluntary job on Wednesday.
4. The grade 11 students report doing significantly more school work or private study than any other grade level.
5. There is tendency for parents to pay for most of the fees for students in the lower grades, and for the students themselves to pay these fees in the senior grades.
6. There is a tendency for those taking no courses to report less favorable parental attitudes towards the Jordan Plan than those taking one or more courses.
7. There is a definite tendency for students to report parental attitudes towards the Plan that are similar to their own attitude. Most students who report a negative attitude to the plan believe that their parents' attitudes are also negative. However, many students who report negative parental attitudes report positive personal attitudes.
8. In answer to question 15 over 300 students offered suggestions or criticisms of the Plan. For the purpose of analysis there were classified under 9 categories:
 - 49 students criticized the high costs of many of the courses.
 - 82 students suggested changes in the nature or range of the Jordan activities.
 - 24 students criticized the short lunch period that has been introduced as a result of the altered school schedule.
 - 53 students criticized various features of the way the Jordan Plan is organized or suggested ways in which it might be improved.
 - 12 students commented on the transport difficulties associated with the Wednesday activities.
 - 38 students expressed concern over the supervision of the Wednesday program and the vandalism and poor discipline they observed.
 - 11 students expressed concern over the lack of student participation in the plan and urged some effort be made to solicit greater student support.
 - 73 students made positive statements in support of various aspects of the plan or of the Jordan Plan in general.
 - 57 students made comments which could not be classified under the foregoing categories.

COMPARISON OF DATA FROM THE MARCH 8 QUESTIONNAIRE WITH DATE
FROM A SIMILAR QUESTIONNAIRE ADMINISTERED SEPTEMBER 28th, 1973.

1. Numbers of students taking 0, 1, 2, 3, 4 Jordan Plan activities.

	0	1	2	3	4	
28/9	143	239	180	63	9	634
Total	22.6	37.7	28.4	9.9	1.4	100
8/3	201	276	91	27	-	595
Total	33.8	46.4	15.3	4.5	-	100

2. Both questionnaires included a question designed to determine the general level of support for the Jordan Plan among students. However, the first questionnaire only allowed a dichotomous choice (yes/no) whereas the second questionnaire item included a third option for those students still uncertain as to their preferences.

Do you prefer the four day week and the Wednesday activities to the normal five day school week?

Sept. 28	Yes	No	
	593	41	634
Total %	93.4	6.5	100
March 8	Yes	Unsure	No
	505	53	36
Total %	85	8.9	6.1
			100

APPENDIX D

STAFF QUESTIONNAIRE #1

Questionnaire Form (Designed by the
Principal) showing responses

JORDAN PLAN - QUESTIONNAIRE

1. Student achievement on the four day instruction week compared to the five day week is:
(Results)
 1. Less 2
 2. Same 16
 3. Greater 1
2. Due to longer instruction day the student's ability to work is:
 1. Less 5
 2. Same 12
 3. Greater 2
3. 50 minute periods compared to the former 40 minutes is preferred:
 1. Reduced 3
 2. Same 6
 3. Improved 11
4. Teaching certain courses for two 50 minute periods per day as compared to one 80 minute period is preferred:
 1. Less 3
 2. Same 1
 3. More 14
5. With the open Wednesday I find myself organized for teaching:
 1. Less -
 2. Same 7
 3. Better 14
6. With the open Wednesday I am able to plan my work:
 1. With more difficulty -
 2. Same 6
 3. Better 15
7. With the open Wednesday I find my teaching load:
 1. Too heavy 2
 2. Same 10
 3. Easier 7

8. During the Wednesdays I have been able to provide students with tutoring:

- | | |
|---------|----|
| 1. Less | 1 |
| 2. Same | 12 |
| 3. More | 8 |

9. Do you find the particular area you teach coordinated:

- | | |
|-----------|----|
| 1. Poorer | - |
| 2. Same | 6 |
| 3. Better | 14 |

10. Your participation in extracurricular activities is:

- | | |
|-------------------|----|
| 1. More difficult | 4 |
| 2. Same | 11 |
| 3. Improved | 6 |

11. Seven fifties per week with the Wednesday free from instruction as compared to seven forties five days per week is preferred:

- | | |
|---------|----|
| 1. Less | 5 |
| 2. Same | - |
| 3. More | 16 |

12. The open Wednesday provides me with the opportunity to discuss curriculum materials and curriculum:

- | | |
|---------|----|
| 1. Less | 1 |
| 2. Same | 3 |
| 3. More | 17 |

APPENDIX E

STAFF QUESTIONNAIRE #2

Questionnaire Form (Designed by a Teacher)

Data Sheet

JORDAN PLAN QUESTIONNAIRE

January 1974

1. Student achievement on the four day instructional week as compared to the five day week appears to be:
 1. Lower
 2. The same
 3. Higher
2. Discipline and school tone this year as compared to last appear to be:
 1. Worse
 2. The same
 3. Better
3. With the open Wednesday I find myself organized for teaching:
 1. Less
 2. The same
 3. Better
4. With the open Wednesday I find my teaching load:
 1. Heavier
 2. The same
 3. Lighter
5. During the Wednesdays I have been able to provide students with tutoring and extra assistance:
 1. Less
 2. The same
 3. More
6. With the open Wednesday I find the area I teach coordinated:
 1. Poorer
 2. The same
 3. Better
7. My participation in extracurricular activities is:
 1. Less
 2. The same
 3. Increased
8. Since the beginning of the school year my attitudes towards the Jordan Plan have:

1. Become less favorable
 2. Remained about the same
 3. Become more favorable
9. Seven fifties per week with Wednesdays free from instruction as compare to seven forties five days per week is preferred:
1. Less
 2. The same
 3. More
10. I would prefer that the Jordan Plan:
1. Be discontinued at the end of this school year in favor of a five day school week
 2. Be continued in the 1974-5 year on an experimental basis

Teachers new to the school at the beginning of the 1973-4 year should answer only questions 8,9 and 10.

DATA FROM THE QUESTIONNAIRE OF JANUARY 1974

Question	Teachers appointed before the end of the 1972-3 school year		Teachers appointed during the 1973-4 school year	
1.	1	2		
	2	16		
	3	4		
2.	1	6		
	2	11		
	3	3		
3.	1	1		
	2	7		
	3	13		
4.	1	5		
	2	14		
	3	2		
5.	1	-		
	2	11		
	3	11		
6.	1	-		
	2	4		
	3	18		
7.	1	3		
	2	11		
	3	8		
8.	1	3	2	
	2	11	4	
	3	8	1	
9.	1	3	-	
	2	1	2	
	3	17	5	
10.	1	6	1	
	2	16	6	

APPENDIX F

TELEPHONE SURVEY OF PARENTS

Survey Form (Designed by Parents)

Report of Results (Prepared by Parents)

256

NO.

TELEPHONE SURVEY OF PARENTS' OPINIONS REGARDING THE JORDAN PLAN

1. NAME OF RESIDENT 2. ADDRESS
3. PHONE 4. STATUS MOTHER ()
FATHER ()
5. INTERVIEW: TIME DAY PARTLY COMPLETED ()
REFUSAL
REASON:
6. INTERVIEWER
(YOUR NAME)

INTRODUCTION: Hello: Am I speaking to Mr. or Mrs. ?
My name is . I am working in conjunction with the
PARENTS' ADVISORY COMMITTEE to the Jordan Plan. We would like your reaction,
as a parent, to the Jordan Plan. Would you mind answering some questions?

QUESTIONS:

1. Do you know about the 4-day school week at School? Yes () No ()
If no would you like me to tell you about it so you can give me your
opinion of what is going on? Yes () No ()
2. Are you getting enough information about the Jordan Plan? Yes () No ()
3. Do you think this program is offering your child a richer learning
experience? Yes () No ()
4. Do you think your child is benefitting from this program? Yes () No ()
5. Because of the program is your child more interested in the academic
program? Yes () No ()
6. Do you think this program is worthwhile and should be continued? Yes () No ()
7. Would you like to be involved in the program? Yes () No ()
8. Do you think this program has changed the people's attitude to the
school? Yes () No ()
9. If your child is taking one or more courses in the program, do you think
you are putting out too much money? Yes () No ()
10. What does your child do when he is not at a course on Wednesday? Is he:
- at home? Yes () No ()
- wasting time? Yes () No ()
- studying on his own? Yes () No ()
11. Do you see weaknesses or flaws in the program? Yes () No () - COMMENTS:
CONCLUSION: Thank you very much.

RESULTS OF TELEPHONE SURVEY REGARDING PARENTS' OPINIONS

	<u>YES</u>	<u>NO</u>	<u>OTHER</u>	<u>NO ANSWER</u>	
1.	139/140 99.3%	1/140 .71%			
2.	87/140 62.14%	50/140 35.71%	11/140 1.43%	1/140 .71%	
3.	80/140 57.14%	39/140 27.88%	19/140 13.57%	2/140 1.43%	
4.	82/140 58.57%	37/140 26.43%	15/140 10.71%	2/140 1.43%	<u>SOME</u> 1/140 2.86%
5.	48/140 34.29%	67/140 47.86%	21/140 15%	4/140 2.86%	
6.	92/140 65.71%	27/140 19.29%	20/140 14.29%	1/140 .71%	
7.	38/140 27.14%	91/140 65%	7/140 5%	4/140 2.86%	
8.	46/140 32.86%	39/140 27.86%	57/140 40.71%	3/140 2.14%	
9.	48/140 34.29%	82/140 58.57%	7/140 5%	3/140 2.14%	
11.	65/140 46.43%	55/140 39.29%	9/140 6.42%	11/140 7.86%	
10.	<u>HOME</u> 78/114 81.43%	<u>Y&N</u> 5 29	<u>NO</u> 2	<u>DON'T</u> 2	<u>WASTING TIME</u> YES NO DON'T K 39 52 2 66.43%
					<u>STUDYING</u> YES NO DON'T K 59 42 1 72.86%

HOME: 114/140 or 81.43% answered this part of question 10. - of these
78 said yes, 5 said yes and no, 29 said no, 2 didn't know

WASTING TIME: 93/140 or 66.3% answered, 39 said yes, 52 said no,
2 didn't know

STUDYING: 102/130 or 72.86% answered - 59 said yes, 42 said no,
1 didn't know

WORKING: 9 parents reported they had children working on Wednesday

APPENDIX G

PRESENTATION OF THE SUPERINTENDENT
TO THE GOVERNMENT

Presentation (Retyped from the original)

1. Rationale:

Accelerating change in society has placed new demands onto the educational institutions that are at society's disposal. Whether these new expectations have been deposited on the steps of schools by design or accident is irrelevant. The demands are real. Schools are expected to be all things to all people. Graduates are supposed to have a good academic background, to be physically and mentally fit, to have had exposure to the fine arts, to have some ability in leisure time activities, and to be constructive additions to our democratic way of life.

As schools attempt to meet these goals, teachers and administrators find themselves needing more and more time to plan their programmes, since the many threads of academic, culture, recreation, etc. are constantly intertwined. Planning is critical in that the daily experience of our young people must be meaningful and satisfying to them, and not confusing as it might tend to be otherwise. This time for group planning is difficult to attain with present school programming without taking these talented teachers away from contact with our future adults.

A further restriction is that in a smaller school jurisdiction, the optionality of staff talents necessarily is limited, that is, the number of interests expressed by all students cannot always be satisfied by the relatively smaller number of teachers.

It is doubtful that schools, with their historically based organization, can achieve excellence in all these areas without assistance from the communities at large. Each community has its peculiarities in resources and in its lack thereof.

has a wealth of resources in people. There are numerous people with skills and talents to share with our young people. Physical resources are somewhat anemic. There is a recreation centre with artificial ice facilities, a public curling club and a golf course. There are no library facilities, no swimming facilities, no university facilities, none of the many historical and current research facilities. These kinds of facilities are close in that they are in , but difficult to utilize with present school time structuring.

With some of these thoughts in mind, the staff of School in submitted a plan which should improve the total school experience for its clients, the students. They are calling it the Jordan Plan.

2. Statement of Objectives:

Specifically, the Jordan Plan is designed to meet the following objectives:

- i) to make total research facilities more readily available to the students. Public libraries, university facilities, industrial plants, etc., are more readily available during the normal working day. The plan allows for these experiences.
- ii) outdoor education, field-trips, be they in the area of the sciences, fine arts, culture, etc., should not impinge on others. There are experiences which are most easily gained during the day. For example, a visit to the Legislative to observe government in action. However, the group leaves behind students whose classes are minimized due to classes being missed, and the accompanying teacher leaves classes that must be managed by other people. The plan facilitates these experiences.
- iii) to allow for greater parent and community involvement in the school. The school day is so fully scheduled that it is nearly impossible to allow community agencies to share their talents. These services then are on an after school basis or weekends. This is after major energies have been expended at school, or when not all young people are free to participate for various reasons.
- iv) to facilitate professional services. Students invariably miss classes for medical, dental, driver-examination, etc., appointments. The Jordan Plan would allow most of these to happen during regular business hours without having to miss class time.
- v) to facilitate parental consultation. In order for a parent to consult with teachers during a working day, teachers generally need to be called out of classes. Thus the rights of one are infringing the rights of another. The plan will alleviate this problem.
- vi) to provide more effective planning time to teaching staffs. Teachers now get a so-called preparation period daily. However, when a teacher has this period, other members of his department may be teaching.

The plan would allow the teachers to gather up these preparation periods into a block of time when all teachers are free. This will also allow for joint planning which in turn should result in a richer programme for the individual student.

3. The Jordan Plan:

The Jordan Plan is essentially merely a reorganization of the instructional week. The new arrangement would allow for instructional requirements to be met on Monday, Tuesday, Thursday and Friday of each week, leaving the Wednesday free to facilitate the stated objectives.

In practice, the week would be as follows:

i) For students--

M.T.T.F. - $70 \times 50 \times 4 = 1400$ minute week for a 35 credit load.
Wednesday - Optional Activity Day

Activities might include:

- homework assignments at a place of their choice (home, school)
- research day using community facilities
- Work Experience Programmes
- Special Projects for High School credits
- Field Trips
- Community Agency Day, Recreation Board, Department of Culture, Youth and Recreation, 4H, Hunter Training, St. John Ambulance, A.M.A. Alberta Safety Council
- Interest Groups--Private Music Lessons, Motor Bike Safety, Figure Skating, Baby Sitting Courses,
- Parental Involvement Day--Consultation with teachers, Parents may offer their talents, Parents may participate as students
- Professional Services Day--Dentist, Doctor, etc.

The possibilities are almost endless. Initial student requests are attached. (Appendix A). Resources need only to be coordinated.

ii) For teacher--

M.T.T.F. - full teaching days; $7 \times 50 \times 4 = 1400$ minutes which is a normal weekly teaching load.
Wednesday - $5 \times 40 = 200$ minutes which is a normal weekly preparation time. Therefore, Wednesday A.M., teachers would be planning as a staff the experiences for the students. Wednesday P.M. they are available for consultation or are free to participate with the students in the optional activities that exist.

It may be noted that Wednesday was selected as the option day. This was done for several reasons:

- i) The Jordan Plan is not a 4-day week with long weekends.
- ii) Two days of solid classes are taxing, but bearable if on the third a self directed doing day is available.
- iii) Mid-week seemed most suitable to agencies contacted.

4. Initial reaction to the Jordan Plan:

i) Governmental--

- (a) Department of Education--The plan, since it is a reorganization of time only, does not contravene any legislation.
- (b) School Board--It is anxious to implement the plan on a trial basis if its electorate is agreeable. It insists upon an on-going evaluation, so that periodic assessments are available, and that there are no extra costs to the School Board.

ii) Teachers. It is their plan, and they are most anxious to implement the plan.

iii) Students. They received the plan most enthusiastically. They see its greatest merit in being able to delve into interest areas that have been denied to them in a regular school setting.

iv) Parents. Three groups of opinion leaders in the community were initially exposed to the plan. Almost unanimous approval was voiced. A well publicized general meeting of all parents (press, television, telephone calls) granted 87.9% approval on a secret ballot. They made two requests if the plan is implemented:

- (a) a Parent Advisory Board be elected to monitor and assist with the programme
- (b) evaluation be continuous.

v) Community Agencies:

- i) Written submissions have been received from the following, offering programmes and people.
 - Recreation Centre--Facilities and people at cost.
 - Alberta Motor Association--Fleet of cars and instructors at cost.
 - Alberta Safety Council--people at cost.

ii) Verbal communications have been most enthusiastic. Programmes need to be gathered and coordinated.

5. Implementation:

It is proposed that the plan be implemented by the second week in September.

Some immediate concerns have been answered. The school facilities are available to the community agencies free of charge. The School buses will be operating on a regular basis bringing the Elementary

children to school. Thus, transportation to and from school is no problem.

However, there are other considerations. There is a significant number of people involved in the Wednesday programming and thus it seems critical that a coordinator with secretarial assistance be provided.

It has been found that a number of instructors will need to be hired to operate programmes. Some facilities need to be rented, and transportation to and from these facilities needs to be paid for.

It is probable that students may be assessed some fees for expendable materials that they consume. However, if the total cost of the programme is to be borne by the participants, it is very probable that numerous students will not be able to participate in a significant number of these programmes.

It is also probable that the students who will be kept out of the programmes are the ones who would benefit most from them.

It is with this in mind I submit the following budget to your Department for financing. The budget is broken down into two time periods, from September to December, and from January to June.

6. Budget:

	September 73 to December 73	January 74 to June 74
i) People		
Coordinator \$600.00 @ month	3000	3600
Secretary \$320.00 @ month	1600	1920
15% for employee benefits (U.I.C., etc.)	540	821
Instructors - \$5.00 @ hour		
Arena - 1 instructor		
Gymnasium - 1 instructor		
Leadership - 1 instructor		
Total of 5 instructors \$5.00 per hour	2100	5600
23 hours/week of instructional time for specifics as attached (Appendix A)	1610	2761
ii) Facilities		
Swimming Pool - \$10.00 @ hour	840	188
Arena - \$5.00 @ hour	420	721
iii) Transportation .50¢ per mile (Concerned with swimming only)	1960	3322
TOTAL	\$12,070	\$18,788

It should be noted that the number of instructors and the hourly rates are approximate and can fluctuate in either direction. At any rate, we would need to constrict ourselves to an agreed upon budget.

7. Conclusions:

We in School District are quite anxious to implement this plan on an experimental basis. We feel that our young people will derive two-fold benefits:

- i) due to better planning by teachers, the total school programme will be superior to what it has been.
- ii) due to community participation, students will have the opportunity to experience programmes which they normally would not be entitled to.

With the co-operation of the staff, parents, community and governmental agencies, our students should be better able to cope with a changing society.

APPENDIX A

Survey Sheet

High School

For Information

by means of this sheet, we are asking students who will be in attendance at _____ next year to indicate by a check _____ those activities in which they might participate by FREE choice, if these be offered.

<u>121</u>	Hockey School	(2)	<u>190</u>	House League Sports	
<u>66</u>	Refereering School	(2)	<u>77</u>	Skill Clinics	(2)
<u>275</u>	Riding Club		<u>45</u>	Leadership Training	
<u>4</u>	Squires		<u>111</u>	Cultural Exchanges	
<u>49</u>	Squirettes		<u>226</u>	Cycling	(1)
<u>52</u>	Baby Sitting Course	(1)	<u>147</u>	Cross Country	(1)
<u>85</u>	Dancing Club	(1)	<u>41</u>	Orienteering	(1)
<u>68</u>	Instrumental Music		<u>84</u>	Motor Bike Safety Course	
<u>91</u>	Band	(2)	<u>226</u>	Defensive Driving	
<u>66</u>	Music Lessons (Private)		<u>115</u>	Art	(2)
<u>42</u>	Figure Skating	(1)	<u>126</u>	T.V. Production	
<u>338</u>	Swimming		<u>249</u>	Lessons from A.M.A.	
<u>148</u>	Hunter Training	(2)	<u>50</u>	Bridge (learn to play)	
<u>48</u>	4 H Club	(1)	<u>60</u>	Chess Club	
<u>166</u>	Arts & Crafts	(3)	<u>108</u>	St. John Ambulance	
<u>95</u>	Little Theatre	(1)			

No. of respondents
desirous to
participate

No. of paid
instructors

Please add any others which you feel might be of interest to you and others.

_____	_____
_____	_____
_____	_____

APPENDIX H

LIST OF WEDNESDAY JORDAN PLAN
COURSES, SEPTEMBER 1973

Course List

JORDAN PLAN

To Date: August 30th
1973

COURSES BEING OFFERED	APPROXIMATE COSTS (\$)	APPROXIMATE LENGTH OF TIME (weeks)
1. Swimming	10.00	10
2. Riding Club	25.00	15
3. A.M.A. Driving Lessons	48.00	12
4. Defensive Driving	12.00	8
5. Hockey	15.00	30
6. Band	1.00	30
7. Motor Bike Safety	1.00	8
8. Drug Information	1.00	4
9. Yoga	9.00	12
10. Fencing	10.00	15
11. Weaving	10.00	10
12. Boxing	1.00	30
13. Introduct. Art	10.00	10
14. Art 2 Oil Painting	10.00	10
15. Calligraphy	10.00	10
16. Crafts	1.00	10
17. J.H. Flag Football	1.00	8
18. S.H. Flag Football	1.00	8
19. Archery	1.00	8
20. Fishing	1.00	8
21. Ceramics	1.00	
22. Debating	1.00	
23. Curling		
24. Little Theatre		30
25. Bridge Club	1.00	10
26. Hunter Training	1.00	10
27. St. John's Ambulance	3.00	
28. Child Care		
29. Home Nursing		

APPENDIX I

TEACHER INTERVIEW SCHEDULE

Interview Schedule (Prepared and Administered
by the Researcher)

INTERVIEW SCHEDULE

PART I: DEMOGRAPHIC DATA

A. General

1. Name
2. Sex
3. Age
4. Address (Jordan Township or elsewhere)
5. Marital Status
6. Educational qualifications

B. Work Experience

1. Present position
2. Number of years at Jordan High School
3. Number of years in the teaching profession

PART II: RECONSTRUCTION OF THE INTRODUCTION OF THE FOUR DAY WEEK

Let us first go back to when you first heard about the possibility of a four day instructional week.

1. When was that?
2. How did you first hear about the possibility?
3. Do you recall who it was who introduced the subject?
4. Where did . . . learn about a four day week?
5. Can you recall the atmosphere of the first meeting of staff held to discuss the possibility of introducing a four day week?
6. From your knowledge, how much thinking and organizing had been done before you heard about it?
7. Can you recall your first reactions on hearing of the possibility of introducing a four day week to Jordan High School?
8. At what stage did the Principal (Superintendent, Board) become involved in discussing the proposed innovation?
9. Were there any reasons given for introducing the four day week? What were they?
10. Do you think there may have been other reasons that were not mentioned? What were they?
11. What features of the four day week attracted you to the Plan in the beginning?
12. What negative features did you foresee at this stage?
13. Who seemed to be the most influential people in introducing the four day week?
14. What did you think . . . (give names) hoped to accomplish by the introduction of a four day week?
15. What kind of initial reaction did the four day week idea get from the staff?
16. How was the decision made to go ahead with the introduction of the four day week?

PART-III: BEHAVIORAL MODIFICATIONS BROUGHT ABOUT BY THE FOUR DAY WEEK

I would like to find out what kind of changes the Jordan Plan has brought in the life and activities of the school.

A. Students

I am interested to discover how the four day week has influenced the behavior and attitudes of the students.

1. Is there a significant discipline problem in this school? Is it related to the Jordan Plan in any way?
2. Has there been any significant change in the level of academic achievement since the introduction of the Jordan Plan?
3. Has the longer school day resulted in any significant increase in fatigue among the students?
4. Do you spend any more or less time with students outside the classroom situation than you did in previous years?
5. Do you think there is any significant difference in the participation of junior high and senior high students in Jordan Plan activities?

B. Task Environment of Teachers

1. Do you find that teaching a four day instructional week is any more or less emotionally or physically taxing than a five day week?
2. Do you find the new fifty minute period significantly different from the old forty minute period?
3. How do you spend your time on Wednesday? Which activities take up most time?
4. How much time do you spend in tutoring or counselling students on the average Wednesday?
5. What time do you usually leave the school on Wednesday?
6. Do you think that other teachers on the staff have the same reaction to the altered teaching schedule as you?

C. Interpersonal Relations

1. Do you have any more or less time in which to interact with other teachers as the result of the altered schedule?
2. Has the four day week brought the staff any closer together, or the reverse?
3. What is the present state of morale among the staff? Can you think of any reasons why it should be at this level?
4. Is this a cliquey staff? Can you identify the major cliques among the staff?

D. Recreation

1. Have you taken any part in Wednesday Jordan Plan activities during the year?
2. What is the extent of your involvement in other extra-curricular activities?

PART IV: ATTITUDE TOWARDS THE SCHOOL

1. Is Jordan High School a good school? How does it compare with other schools in your experience?
2. Is Jordan High School any more innovative than the average high school?
3. Does the school possess a distinctive set of goals or objectives? Do you know what these goals are?
4. Do you know how these goals were arrived at?
5. Do you find these official goals a useful guide for action?
6. Which goal of the school is the Jordan Plan intended to satisfy?

PART V: COMMITMENT TO THE JORDAN PLAN

1. Has the Jordan Plan developed in the way you anticipated?
2. How would you react if the Board were to cancel the four day week at the end of this year?
3. Does anyone on the staff remain strongly opposed to the Plan?
4. Do you think the Jordan Plan will continue into next year?